

CONSIDERATIONS REQUIRING INVESTIGATION IN
THE ALLOCATION OF FUNDS FOR LIBRARY MATERIALS
AT THE UNIVERSITY OF CAPE TOWN

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Dedicated to

MRS. J. I. LAURENSEN

University Librarian at U.C.T.

from 1:1:1975 to 22:7:1979

whose faith and courage

throughout her long illness

was an inspiration to all her staff

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INTRODUCTION

A. SCOPE AND RATIONALE

With very few exceptions, all libraries, be they national, university, provincial, municipal or special, are funded to a greater or lesser degree by public money. Thus as Malan says, this subsidy presupposes that their services and stock should be used in the public interest. (Malan, 1978:83).

In the case of South African university libraries, which constitutes the province of this study, the parent institution currently receives a subsidy according to the provisions laid down in the van Wyk de Vries Commission's recommendations. (de Vries, 1974). Included in this subsidy are formulae designed specifically to enable the university library to operate, i.e. allowances are made both for personnel and for the acquisition of library materials.

It is in this latter connection that the present investigation has been made, viz. the allocation of funds received from the State via the university administration to the teaching and research units to enable them to fulfil their basic function.

Ideally, the question of distribution should be discussed when funds are sufficient to meet all units' legitimate needs. Unfortunately however, the healthy climate which is conducive to sober and unharassed planning does not exist at the moment, an ad hoc cut in the state subsidy having been imposed in 1978 at a time when spiralling costs of library materials and increasingly sophisticated research requirements have already rendered available funds inadequate. However, every cloud has a silver lining. Financial stringencies make it imperative to conduct a thorough study of all aspects of librarianship which impinge upon allocation in an endeavour to rationalise the allocation of funds according to basic, generally accepted principles, such as those laid down by the U.S.A. Association of Research Libraries. These fundamentals include equity, flexibility, intelligibility, objectivity and compatibility with the collection development policy operational at the library. (A.R.L., 1977:2-8).

B. METHODOLOGY

In essence, a twin-pronged investigation has been conducted.

The first consists of a conceptual study, based on a literature survey of English-language material relating to the more important aspects of academic librarianship which have a bearing on the main theme. These aspects include:

- (a) Collection development, (elaborated on in Chapter 2, page 3);
- (b) Evaluation, (discussed in Chapter 3, page 24);
- (c) Journals, (found in Chapter 4, page 41);
- (d) Resource-sharing, (which comprises Chapter 5, page 56);
- (e) Budgetary techniques, (related to allocation of funds primarily in a university library situation in Chapter 6, page 73).

Prior to reporting on the empirical survey, which constitutes the second 'prong', a backdrop on university funding in general and the University of Cape Town's *modus operandi* in particular was required to provide the setting for the survey.

This consists of a discussion of the van Wyk de Vries Commission's recommendations as they affect university libraries, with special emphasis, as mentioned earlier, being placed on the formula designed to provide the library materials budget.

This is followed by a chapter dealing specifically with the University of Cape Town's financial arrangements operative during 1978 and 1979, covering the grounds for the current investigation.

The empirical study consists of a survey of all the South African universities, which like the University of Cape Town, are funded under the provisions of the van Wyk de Vries Commission, and hence fall under the Department of National Education. This similarity of subsidisation provided the necessary common denominator to ensure the basis for a valid comparison.

A questionnaire (Appendix 6 on page 192), covering not only allocation techniques but also acquisition policies and practices

was sent to each university library, with a covering letter requesting a personal interview.

The response to the questionnaire, which by virtue of the subjects covered, tended to be exhaustive, was most gratifying, and an analysis of the survey is to be found in Chapter 9 on page 127.

SECTION 1 : LITERATURE SURVEY

CHAPTER 1

UNIVERSITY LIBRARY OBJECTIVES

The financial assistance given to a university, either as a result of a State subsidy and/or from bequests and donations, is intended to enable that institution to achieve its goals. The subsidiary components, such as the library, to which funds are allocated by the parent institution, must contribute to the attainment of those objectives, obviously circumscribed by their nature and role in the university. It is therefore within this context that the further distribution of funds to the teaching units must be made.

In order to frame the parameters of this research, it is necessary to provide an outline of university library objectives. The outline however need only be brief as it is intended solely for practical application and not for speculative and theoretical considerations. Thus only two sources have been cited:

- (a) the Van Wyk de Vries Commission, whose formulae determine the amount of State subsidy; (de Vries, 1974).
- (b) the British University Grants Committee, which adds a further perspective and is relevant by virtue of the strength of the Anglo tradition in many South African universities. (U.G.C., 1967).

In order to determine the objectives, it is necessary to clarify the nature of the institution of which it is an integral part.

What then is the nature of a university? The van Wyk de Vries Commission summarised the answers it received to this question from various sources. The consensus of opinion was that a university is "an autonomous community of teachers and students dedicated to the search for or service of truth." (de Vries, 1974:18).

The Commission however regarded this definition as too idealistic, and certainly not a valid reflection of the South African situation. This was primarily due to the exclusion of the roles played by the State and society. They therefore proposed the following description. "The university is a corporation ("universitas"), founded and incorporated by an act of Parliament, for the purpose of pursuing knowledge at the tertiary level and of being a centre of learning, teaching and education, and with the

special power to confer degrees." (de Vries, 1974:73).

The function of an institution stems from its nature. The tendency has been to regard a university's function as being two-fold, namely teaching and research. The Commission sees it as five-fold. These are paraphrased below:

- (a) The advancement of learning by bringing to light the knowledge amassed over the ages, that is, the promotion of the humanities, natural and applied sciences.
- (b) The education and moulding of students, together with the inculcation of such qualities as scholarship, honesty, a scientific mind and perseverance.
- (c) The preparation of students to practise a profession.
- (d) The instillation of common standards of good citizenship in the students.
- (e) Activity, in a scientific manner, in the area of politics so as to keep the national system sound.

The Commission does point out however that South African universities "have their own character and of necessity follow a distinctive South African pattern of development." (de Vries, 1974:17). This derives from the bond between the university and the nation.

The University Grants Committee of 1921 considered the "character and efficiency of a university [to be] gauged by its treatment of its central organ - the library. We regard the fullest provision for library maintenance as the primary and most vital need in the equipment of a university." (Quoted by U.G.C., 1967:9).

Thus the library, as the repository of recorded knowledge, plays a major role in the implementation of the university's prime function. The value of its holdings however, is determined not only by their relevance to the instructional programme, i.e. teaching, which reinforces tradition, but also by their research potential, which innovates and extends the frontiers of knowledge.

CHAPTER 2

*COLLECTION DEVELOPMENT AND ITS IMPLEMENTATION IN
THE AREA OF SELECTION OF LIBRARY MATERIALS*

Essentially, 'collection development' is a comprehensive phrase embracing the three major activities involved in the maintenance of library collections. These activities include the selection of library materials, evaluation and weeding. The distinction between collection development and selection is high-lighted by Feng in a recent article:

"The heart of the library lies in its collections, and collections have to be built continuously. Budgetary constraints perforce stress the need for better defined collection development policy, although the ultimate goal should be an improvement of library service rather than any reduction of library cost. A written collection development policy facilitates a consistent and balanced growth of library resources, and a dynamic policy is one that evolves as the institution grows. Such a policy is based on the understanding of the needs of the community it serves and seeks to define and delimit the goals and objectives of the institution. A collection development statement is not a substitute for book selection; it charts the forest but does not plant the trees. It should be used as a guidepost, not a crutch. Book selection requires judgment and the courage to choose. A sound collection development policy, on the other hand, provides the necessary rationale without which a collection may grow amoeba-like, by means of pseudopodia." (Feng, 1979:39).

However, in much of the literature, selection is regarded as the prime activity and therefore some collection development policy statements, such as those recommended by the American Library Association (A.L.A.) which follow, emphasise this aspect to the exclusion of evaluation and weeding. Thus there is a tendency to use the two terms interchangeably.

2.1. GUIDELINES

A basic planning document has been provided by the Collection Development Committee of the A.L.A. (A.L.A., 1977:40-47). This was promulgated in 1977 under the title Guidelines for the formulation of collection development policies. In order to facilitate library co-operation, the Guidelines recommend that standardisation of

terminology, the definition of five levels of collection and suggested language codes.

The terms of reference of the Committee also included the study of current resources of United States libraries with a view to co-ordinating collection development programmes on a national scale. In addition, the Committee was requested to evaluate and recommend bibliographical tools suitable for facilitating collection development, and to specify the qualifications and training required by selection personnel.

The Committee made a number of assumptions at the outset, the major one being the desirability of a written collection policy statement for all types of libraries who are involved in the selection of library materials.

Such an assumption appears valid in view of the benefits that derive from a written policy. Feng identifies six of these. Firstly, he considers the very process of writing one provides the opportunity for reflection and self-examination, two necessary ingredients for growth and renewal. He sees the policy "as a base for current operation and a springboard for future growth." (Feng, 1979:41). Secondly, it assures a consistent and balanced growth of library resources. His third motive is related to the former, namely, to ensure the desired balance between the subject matters covered, that is "a considered definition of emphasis from the perspective of the whole." (Feng, 1979:42). Fourthly, it serves to remind and alert the book selectors of the legitimate needs of the less vociferous as well as the more articulate members of the library's clientele. The last two factors are more practical in nature. A written policy statement provides a guarantee against any undue pressure group and finally it is a vehicle which can facilitate interlibrary co-operation and resource sharing. (Feng, 1979:41-42).

Over and above the advantages listed by Feng, Osburn sees three others stemming solely from the mechanics of drafting the policy. These are the knowledge gained about existing collections and related collection development activity. A second benefit is the gaining of control over the budget and the influx of materials. Finally, the

formulation promotes greater participation and interaction of a substantial number of the professional librarians than would otherwise exist. (Osburn, 1979:8).

The Guidelines suggested by the Committee include the identification of both long and short term needs of the institution's users in order of priority. This enables funds to be allocated accordingly. Both depth (for researchers and postgraduates) and breadth (for undergraduates basically) should be determined, i.e. "codes for levels of collection density and of collecting intensity to the classification scheme used in describing the collections" must be outlined. (Osburn, 1979:10).

It is suggested that the policy regarding duplication should be formulated in a separate statement, and the necessary funds earmarked therefor. Also emphasised, is the need for a regular review of the policy statements so that they remain relevant to the needs and goals of the institution.

This updating of policy statements is also stressed by Feng, who writes:

"Just as institutions grow, collections grow; so should the collection development policies grow. The strength of tradition lies in the proper use of the past to nurture the present, and the purpose of such a policy statement is to assure stability, not rigidity. Therefore, the presence of a written policy statement cannot be a substitute for intelligent discernment, nor for an ever-alert awareness of the changing needs of the community it serves. For this reason, too, therefore, it is highly desirable, indeed imperative, that such a statement undergo regular, periodic review."
(Feng, 1979:43).

The final guideline involves the co-ordination of the policy with those of other appropriate libraries so that selection can be done in conformity with regional needs and resources.

Within this framework, the Committee advocates that the statement should embrace two factors:

- (a) an analysis of the objectives of the institution as a whole; (Feng's collection development policy statement), and
- (b) a detailed analysis of collection development policy for each subject field. (Feng's book selection policy statements).

These policies should be sufficiently detailed to incorporate form, for example, the ratio of monographs to periodicals; the dependence on manuscripts or government publications for research, and

the feasibility of micromedia as opposed to printed copy.

Osburn has described the guidelines as offering "a sure course to the establishment of a practical and rationally founded document." (Osburn, 1979:7-8).

Another contributor to the literature of collection policy statements and aspects that warrant inclusion is Ann Bender. Although there is a degree of overlapping, her guidelines are more comprehensive. They include:

- (a) A knowledge of the users and their needs, both actual and potential.
- (b) A careful analysis of the existing collection and identification of its strengths and weaknesses.
- (c) The establishment of a weeding policy.
- (d) An estimate of possible or likely fluctuations in the library materials budget, taking cognisance of differential rates of inflation as they affect the diverse materials purchased by a library. These would include, inter alia, monographs, periodicals, micromedia, audio-visual, etc.
- (e) An estimate of what and how much to purchase in non-print forms and an evaluation of the relationship between such material and the existing collection.
- (f) A consideration of such factors as space, rate of deterioration and optimum size of the collection.
- (g) An awareness of what library resources are available both regionally and nationally and assessing the degree to which co-operation in collection development is possible.
- (h) A consideration of which items constitute the core collection, which must be replaced at regular intervals and what percentage of the budget needs to be set aside for new materials. (Bender, 1979:45-51).

Danton has also outlined a selection policy. This was in 1963 and it is interesting to note that the Collection Development Committee also opted for identification of levels of collecting on five levels as recommended by Danton.

He regards the first step as being an official statement of policy, up-dated at regular intervals to ensure relevance, supplied by the university administration, following upon consultation with and advice from the appropriate academic groups. This statement should be sufficiently detailed to encompass the institution's present and probable future programmes of teaching and research. This tallies with the first section of the statement advocated by the Collection Development Committee in so far as it reflects the overall objectives of the university and the library. The statement should also indicate the level of interest in specific areas and the extent to which they will be supported. Danton suggests that the formulation of levels of collecting for subjects and divisions of subjects should be done on a five point scale. He emphasises however, that the entire responsibility for selection and collection building and the entire book budget should reside with the university library because from its "functional and representational universality, the library derives its fundamental imperative of book selection and collection building." (Danton, 1963:2).

He urges the building up of a corps of book selectors by the library who would encourage and foster academic participation, and decide whether to aim towards genuine strength in a more or less limited number of fields, or to divide the available funds uniformly among all possible fields and have a collection which has no real distinction. Danton favours the former alternative, concentrating on areas where strengths already exist, and the university's programmes are comprehensive and intensive. This will enable the collection to achieve a high degree of excellence, both qualitatively and quantitatively. He feels the emphasis should be on current rather than on retrospective material, even when dealing with research as opposed to undergraduate collections. (Danton, 1963:131-140). This stance is also supported by Voigt. (Voigt, 1975:263-271).

Magrill and East cite further restrictions. "In a budget situation in which it is impossible to maintain the level of previous collecting in all fields, it has been increasingly suggested that immediate needs, whether for teaching or for research, should be

preferred to the building up of collections to support future research. The usual justification for this policy is that immediate needs are known, while future needs are to some extent speculative." (Magrill, 1978:22).

G. Osburn regards three principles as being fundamental to any collection policy. These are comparability, a system perspective and flexibility. (Osburn, 1979:10). Another Osburn, Charles, in addition to flexibility, stresses universal perspectives, directional stability and facility of use. He goes on to say "The common and most evident feature of the policy should be its tendency toward the ideal, tempered by a sense of the real on all occasions." (Osburn, 1977:224). He too, like Bender, has provided a resumé of suggested considerations for the design of a comprehensive, yet sufficiently detailed collection development policy. In contrast to the Osburns, Edelman opts for balance, reliability and comprehensiveness. (Edelman, 1979:33-38).

The question of evaluation and written collection policy statements is somewhat analagous to the chicken and the egg. Which comes first? It can be argued that one cannot write a pertinent collection development policy until one has familiarised oneself with the existing strengths and weaknesses of the collection. On the other hand, how can one evaluate a collection without having a policy statement to act as a yardstick?

Mosher considers evaluation to be a function of collection development which should be related to the planning, selection and weeding of collections. By also regarding it as an effective measure of a collection development policy, he implies that evaluation should follow the formulation of a policy statement. (Mosher, 1979:17).

On the other hand, Osburn claims that as a practical measure, it would be useful to precede the drafting of subject statements with a comprehensive evaluation of the collections, according to a uniform plan. (Osburn, 1979:12).

Barbara Rice, in addition to regarding the identification of materials requiring weeding as a logical consequence of writing a collection policy, also advocates the review of materials being received on standing order and of periodical subscriptions. She considers it is necessary, if a working collection is to be developed, to designate a group which will have responsibility for, and author-

ity to make decisions relating to the acquisition of all types of material. As much of the book selection is done by subject specialists in American university libraries, she regards them as the logical candidates to whom the expanded responsibility of developing a working collection be delegated. (Rice, 1977:309-12).

2.1.1. RESPONSIBILITY

Although there is some divergence of opinion and practice with regard to the implementation of collection development policy, the literature places the onus of responsibility for the formulation of policy statements squarely on the shoulders of the library staff.

This has come about partly because academics have defaulted, and partly because it is regarded as part of the inherent responsibility of the library.

In the United States during the 1960's, the pattern of academic control over collection development was still prevalent, according to Danton. (Danton, 1963:71). However, several phenomena occurred during that decade which altered the situation. There was unprecedented student growth and the output of library materials increased dramatically. There were also the "'publish or perish' syndrome [which] overtook U.S. universities everywhere, and the 'new professionalism' in American scholarship [which] resulted in greater demand on the materials resources of libraries, and, at the same time, less interest in 'doing the library's work for it', as the faculty said." (Mosher, 1979:19).

Herbert White encouraged librarians to formulate and adhere to a systematic collection programme in order to ensure the orderly, and within the financial limitations, comprehensive growth of the collection. In support of his stance, he cites the example of a number of academic libraries which have grown in size, not through a planned process of development, but rather as a result of the unco-ordinated and spasmodic efforts of the teaching staff. (White, 1959:241-3).

David Lane notes that most librarians regard collection development as their responsibility and therefore part of their portfolio. He, like Rice, regards the subject specialist as being ideally suited

to the task. (Lane, 1968:364-72).

According to Mosher, the "move of primary collection development responsibility from the faculty to the library, the increase of attention devoted to collection development which resulted, and the common attempt to systematize, rationalize, and improve the planning and procedures of library collection development during the ensuing decade and a half ... has been one of the most significant and original contributions to the growth of professional librarianship in the United States during the last generation." (Mosher, 1979:20).

Gration and Young mention the creation of a Collection Development Officer at a predominantly undergraduate university library between the years 1969 to 1972. (Gration, 1974:32).

Magrill and East also refer to the existence of librarians in such specialised posts at a number of United States libraries. These appointments have generally been motivated to offset declining budgets and the consequent need for co-ordination of selection and acquisitions between the different divisions of large libraries. It was also anticipated that they would lead to improved selection decisions being made, and the incumbents were also charged with the formulation of collection development policies and procedures. (Magrill, 1978:18-19).

Osburn also describes a Collection Development Officer as a co-ordinator of subject librarians. However, he considers the formulation of policy is too great a task to be undertaken by a single individual. He considers it should incorporate "the experience, knowledge, and judgment of a wide range of professionals beyond those who are engaged in the act of drafting policy." (Osburn, 1979:9). He is of the opinion that the Collection Development Officer should be entrusted with the editorship, but the authorship should be assigned to those who are engaged in collection development on a regular basis. Thus, "the vehicle for moving the project forward most effectively is a committee of subject librarians, numbering about a half dozen, chaired by the chief collection development officer of the library." (Osburn, 1979:9).

Examples of written collection development statements used by a number of libraries belonging to the Association of Research Libraries (A.R.L.) are to be found in the Systems and Procedures Exchange Center (SPEC) kit on acquisition policies. (A.R.L., 1977).

The literature therefore points to the desirability of every library having collection policy statements covering each subject area in which it collects. The benefits are mainly threefold:

- (a) The building up of a quality collection relevant to the needs of the users.
- (b) The more judicious use of the library materials budget.
- (c) Facilitating resource-sharing, both on the regional and national levels.

Despite the obvious advantages, a number of libraries do not possess policy statements. Futas has just recently edited a book on library acquisitions policies and procedures in which she reports on the response she received to three thousand, six hundred letters posted to academic and public libraries in North America. Only just over five hundred replies were received, of which three hundred had selection policies. Of these three hundred however, many tended "to indicate a more or less ideal state of affairs rather than day-to-day reality." (Futas, 1977:ix).

2.2. SELECTION OF LIBRARY MATERIALS

Having surveyed the literature dealing with collection development in its broadest context, it is now necessary to treat one of its components in greater detail, viz. selection.

"Selection of books is a matter of prime importance to university libraries because the development of library collections is controlled by it, and because the quality of the collection is one of the two major factors that determine whether the library supports well or poorly the teaching and research programs of the institution of which it is a part." (Danton, 1963:xvi).

So wrote Danton in 1963 when book selection procedures were undergoing close scrutiny in the United States. The validity of his statement has not altered with the passage of time although

practices have changed.

Another opponent of random selection is Richard de Gennaro, the American academic librarian, who writes:

"It is becoming increasingly clear that the long-term solution to the chronic fiscal, staff, space and other problems besetting research libraries lies in ... developing new and more realistic sets of goals, including especially more selective acquisitions policies designed to meet the actual needs of particular institutions and their library users." (de Gennaro, 1975:919-20).

There tends to be three fairly distinct methods of book selection. The erstwhile traditional approach found in many American and British universities together with those in other countries which have been influenced by them, was for the selection to be done exclusively by the teaching staff. The only area in which the library played a role was in the selection of general reference and bibliographical tools. The Continental attitude involved the appointment of subject specialists. More recently, there is a tendency to utilise the knowledge and expertise of both the teaching staff and the librarians to the benefit of the library and its users.

2.2.1. TRADITIONAL ANGLO-AMERICAN APPROACH

In 1957, Harry Bach, a bitter opponent of this approach, surveyed fifty four undergraduate colleges on the question of selection policies. He found that five of them, which he labelled 'self-effacing libraries', had abdicated all responsibility for the selection of materials. He regarded that the libraries of these colleges were characterised by over-reliance on the academics and a twentieth century version of a nineteenth century outlook concerning selection. (Bach, 1957:446-7). In a later article, he considered that allocation of funds to teaching units implied, per se, academic control over selection policy. (Bach, 1964:162).

Danton has written a very authoritative book on selection policies at both German and American university libraries. (Danton, 1963).

In describing the American approach, he says it was based on the premise that books for the library should be selected primarily by the members of the teaching staff, since it was they who were best acquainted with the subject fields and their literatures together with the needs of the students. The library however retained the administrative and legal responsibility for the collection. (Danton, 1963:34).

This was the attitude adopted and practised by the German institute libraries which housed research material. Selection in these instances however, tended to be done in a vacuum without any reference to the holdings in the central library nor to any of the other institute libraries. There was little long-range planning as the directors frequently occupied their posts for a relatively short time. However, during their period of office, due to their uniquely powerful and autonomous positions within their own institutes, purchases tended to be restricted to their own particular research interest, which resulted in the collections growing haphazardly. Thus the main characteristic of these institute libraries was decentralised selection for subject-specialised collections.

2.2.1.1. CRITICS

The position at the German institute libraries was most unsatisfactory and unnecessarily costly to operate. Two major factors contributed to this. The institute libraries were only open to their own members, thus interdisciplinary material had to be duplicated. Secondly, the stock of the institutes was not reflected in the central library's catalogue, thus scholars were unable to know or even find out the total resources of the university in any field.

Although selection was done by the academics in the American libraries, the branch libraries were under the jurisdiction of the main library and so avoided the obvious weaknesses of the German position. Firstly, they were staffed by professional librarians and secondly their stock was reflected in a union catalogue, obviating unnecessary duplication and indicating the university's total holdings.

Danton's plea is for greater library participation in selection on the grounds that members of the teaching staff generally do not have the time to tackle the problem of selection on a regular, systematic, thorough and objective basis. Experience has shown that when selection is left solely to the teaching staff, it tends to lead to unbalanced, unco-ordinated collections which frequently reflect personal research interests of the staff and the neglect of overlapping, interstitial and peripheral works. (Danton, 1963:69-70).

Other critics of the teaching staff being the primary agents in selection are Jasper Schad and Ruth Adams, who itemise the disadvantages. These include the tendency to select books which they themselves use in the preparation of their lectures, or which will be assigned to their students. (Schad, 1969:437-42).

Actually, however, when one takes into account the findings of McGrath (McGrath, 1972:212-19) and Hodowanec (Hodowanec, 1978: 439-47) of the greater use made of course-related materials, these two arguments by Schad and Adams against academic selection are no longer so tenable. They also contend that the teaching staff order books with which they were familiar as postgraduates or which they themselves are using for their own research.

A further disadvantage noted by these authors is the fact that, as a result of the information explosion, specialisation has become increasingly imperative, and the academic is thus compelled to concentrate on ever decreasing segments of the available knowledge, thus leading to gaps in the collection.

Evans is also opposed to selection by the teaching staff. He supports his stance by data collected from samples taken at several institutions. These statistics he uses to prove that books selected by librarians circulate more frequently than those ordered by the teaching staff, even after the latter had scrutinised them prior to ordering. (Evans, 1970:297-308).

2.2.2. SUBJECT LIBRARIANS

In the literature, the appellations 'subject librarian', 'subject specialist' and 'bibliographer' are used and although they have different connotations, they are used to denote a

specialised post in the library whose prime function is the selection of library materials.

Among Bach's fifty four colleges, six represented the avant garde of librarianship in the question of library responsibility for book selection. (Bach, 1957:446-7). It must be noted that this survey was conducted in the 1950's - a period preceding the era of the 'publish or perish' syndrome, the 'new professionalism' and the knowledge explosion, which greatly stimulated the idea of subject librarians. (Mosher, 1979:19).

In fact, the value of subject specialists was noted as early as 1936 in the United States in the Waples and Lasswell study.

These two gentlemen undertook an evaluation of the holdings of five hundred and seventy three highly regarded titles in four social science fields. The study included six major American research libraries, including the New York Public Library, the libraries of Harvard University, the Universities of Chicago, California, Michigan and the Library of Congress. Excluding the last mentioned, it was found that the New York Public Library, where selection was done solely by a corps of subject specialists, held 92% of the titles being surveyed, whilst Harvard held 68%, Chicago 57%, California 45% and Michigan 36%. At this period, selection at the universities was done on a less consistent and systematic pattern by members of the teaching staff. Another observation that deserves mention is that despite the New York Public Library having superior holdings, both in monographs and in periodicals, than any other library evaluated, it had achieved this distinction at less cost than any of the five universities. (Waples, 1936:71).

Two years after Bach, Herbert White reaffirmed the library's responsibility not only for formulating collection policies as noted earlier, but also for being intimately involved in the actual selection process. He was of the opinion that only librarians could "make the objective judgement required here - to weigh the alternatives and to decide which book to sacrifice and which to obtain." (White, 1959:242).

Two other proponents of active library participation are Selby Gration and Arthur Young. They are of the opinion that subject specialists bring the collection to life by functioning in the capacities of bibliographic instructor, selection specialist and reference librarian. In such a role, they introduce a "new personalized dimension to the often impersonal sanitized reference function." (Gration, 1974:34). They advocate the formation of a collection development unit, incorporating the subject specialists. This unit, they consider, should fall under the jurisdiction of the director, or his equivalent, of reader services. Just as Schad identified the knowledge explosion as a factor militating against systematic collection development, so too do Gration and Young, but they intimate that this eruption is paralleled by knowledge obsolescence, and attention to this facet is crucial if the collections are not to degenerate into "bibliothecal mausoleums." (Gration, 1974:32).

Frederic Messick sees the need for subject librarians arising from the fact that at a point in university growth which Danton places at around the one million mark (Danton, 1967:49-50), academic book ordering takes a proportional drop as compared with orders from other sources. (Messick, 1977:368-74).

Guttsman, the librarian at the University of East Anglia, considers subject specialisation to be justified on two counts. Firstly, in terms of service to readers, and secondly, in the building up of book collections. (Thompson, 1979:114).

There is even academic support for subject librarians. This comes from Charles Burdick, an associate professor of history at San Jose State College. He writes:

"The responsibility for expanding the holdings is divided among twenty five to thirty souls, some interested, others oblivious, and a minority intellectually dead. They order whatever happens to strike their fancy, what they selfishly desire for their personal esoteric projects, and what they find reviewed in current journals. These members of the faculty have little comprehension of the overall collection. They are current but no more. They are further limited by the research field of competence from which they seldom change. The product is uneven, questionable on every hand except quantity and of dubious value to future generations." (Burdick, 1964:159).

The question of institute libraries in Germany has already been noted, but German universities had a central library in addition to the decentralised institute collections. Here the premise was based upon library responsibility for collection building, hence the utilisation of subject specialists. Danton mentions Goettingen Library under Count Gerlach Adolph von Muenchhauser and his successor, Christian Gottlob Heyne, both of whom held the reins of book selection firmly in their own hands. (Danton, 1963:35; 15-17).

The advent of the 'Referenten' (subject specialists) in the German university took place round about the turn of the present century. In a typical university, Danton explains, there were generally about eight subject specialists who were assigned the responsibility for the selection of materials, both current and retrospective; for the overall development of the collection; for classification and cataloguing as well as reader service duties. The major drawbacks were the limited number of these specialists who were forced to select in areas outside their speciality. In addition, because of their other duties, they could only devote about twenty hours a week to selection. The difficulty in getting subject specialists in the more esoteric areas also caused difficulties. (Danton, 1963:37-42).

2.2.3. JOINT RESPONSIBILITY

Bach found that the majority of the libraries he surveyed, namely forty three of them, employed a system whereby the teaching staff with the active support of the library staff, did the selection. (Bach, 1957:446-7). During this period, the role played by the librarians tended to be subordinate to that of the academics. The librarians supplemented and rounded off staff-motivated recommendations, and ordered works of an inter- and multi-disciplinary nature, in addition to directing important publications to members of the teaching staff for their perusal.

A joint effort is also put forward by Guy Lyle, who says that despite the librarian's concern and occupation with budgets, building and staffing, he must make the development of the book

collection his major concern. This is because he, despite the help he should receive from members of the teaching staff, is ultimately responsible. Lyle goes on to outline the components which an institution should incorporate into its library programme so as to promote this working combination between the library and the academics. He considers it necessary, firstly, to have a clear understanding of the kind of library the institution is aiming at building and for what kinds of users; and secondly, to have a genuine and general awareness of the varying roles which different books play. A third ingredient, in his consideration, is the organisation of an effective body inclusive of the teaching staff and the librarians, to do the selection, and finally, a liberal and assured annual fund with regular increases for book purchases is mandatory. (Lyle, 1963:37-47).

Danton, also writing in 1963, noted in his survey of American university libraries, a wide spectrum of practices and policies. However, at some of the largest and best American universities, he found a clearly recognised joint responsibility existed with the librarians actively contributing to book selection. (Danton, 1963:62-63).

Writing four years later, Danton again stressed the importance of selection as being not only "the highest professional task of the librarian", but also "the most fundamental, the most challenging and the most indispensable function of the library." (Danton, 1967:45). He noted the change occurring in major British and American libraries where the swing from academic selection to the emergence of subject librarians was gaining rapid approval, or, as at the University of California at Los Angeles, area specialists of whom nine had been appointed at the time of writing. Because of the far-reaching consequences of poor selection, Danton regards the use of blanket orders as providing "a perfect culture for the birth and maintenance of bibliothecally dangerous bacteria." (Danton, 1967:55). This is because the onus is put on the agent to decide what titles should be provided, and despite profiles supplied, this frequently leads either to the acceptance of unsuitable or irrelevant material, or to the assumption that anything not supplied is ipso facto not required.

Cecil Byrd reports on the emergence of subject specialists at Indiana University Library. The library resources relevant to the departments of social sciences, humanities and area studies were part of the general library collection, and had, therefore, unlike the departments served by branch libraries which provided specialised services, only received such help as could be provided by a staff of reference librarians with a general background. It was felt that with the massive and rapidly increasing body of literature and of highly specialised reference tools it was no longer possible to meet all the particularised needs of both staff and postgraduates without the help of specialists.

Thus ten professional posts were created and it was envisaged that the incumbents would not only ensure more comprehensive book selection, upgrade and personalise the service given, but also contribute significantly to the improvement of communication between the librarians and the teaching staff. What was postulated has in fact eventuated, as a number of people have reported on a dramatic change in the Library, from a highly institutionalised, impersonal service unit to one that is essentially sensitive to the needs of the users. Even the Administration regards the enlargement of the Library establishment to be worth the increased investment both in terms of service and improved book collections which have developed depth and comprehensiveness.

The departments at Indiana University have in fact delegated the authority to purchase to the subject specialists although they have retained their traditional participation in book selection. These librarians order current material after perusing scholarly journals, national bibliographies, publishers' announcements, etc., and retrospective material only after the collection has been reviewed and gaps noted or as a result of specific requests from staff or postgraduate students. (Byrd, 1966:191-3).

Writing at the same time, Jack Clarke and Richard Cooklock note the tendency among many administrators charged with the conversion of teachers' colleges to university status and the concomitant need to expand limited library resources as rapidly as possible, to insist on the librarians drawing up a well-formulated acquisitions

policy so as to minimise aimless and haphazard purchasing. "The controlling and shaping influence on the collection ... must be exercised by the librarian himself since the budgetary responsibility rests on his shoulders." (Clarke, 1966:223). However, the authors go on to say:

"There is no gainsaying the fact that the only strong research collections with noted quality are those built in depth by faculty and librarians working together as colleagues", and

"Joint responsibility for the development of the collection has proved most effective when subject comprehensiveness is desired and funds are plentiful. The faculty's specialised knowledge and research experience provides invaluable guidance for long-range planning of graduate facilities and resources. They are less reliable, however, when it comes to agreeing on the basic works in their fields. You can get as many statements of what is essential and considered 'standard' in each discipline as individuals you might wish to consult. Under these circumstances, it becomes the librarian's responsibility to acquaint the faculty with sound principles of book selection and a clear understanding of his acquisition problems and budgetary limitations. Only then is real co-operation possible." (Clarke, 1966:224 & 232).

Edelman has described the inter-dependence of the academic and library staff more succinctly. "On balance, it has always been the scholar who provided the impetus; the librarian has made it possible." (Edelman, 1976:237).

2.3. CAMEOS OF SUBJECT LIBRARIANS

What should the characteristics, educational achievements and interests of a subject librarian be?

Gration and Young emphasise the qualifications. Subject specialists should be scholars, and thus aware of innovations in scholarship, and this should be combined with the mastery of librarianship techniques. These qualifications would then enable them to compensate, by their knowledge and interests, the inevitable gaps if selection was left solely to academic initiative. (Gration, 1974:28-34).

Another profile is provided by Robert Haro who considers the traditional concept of the subject specialist or bibliographer as a book selector for about 50% of his time to be inadequate. He

sees him as "an advanced reference librarian, a researcher, an instructor in library use, a vital communication link between the library and appropriate academic departments, and a friend to the students." (Haro, 1969:164). He sets very high standards for his bibliographers, viz., not merely a Master of Library Science degree, but also "a subject background demonstrated by meaningful graduate study, an advanced degree, proficiency in one or more foreign languages, and an intimate knowledge of the book business market and out of print trade ..." (Haro, 1969:165). Haro's specifications are akin to those required by the German Referenten who, inter alia, all held doctorates in subjects over and above Librarianship. With these qualifications, Haro is of the opinion that he will be equipped to compile annotated bibliographies; advise staff and students about important reference and research tools, with the necessary instruction in their use, and thus forge a good relationship between members of the teaching and library staffs.

In response to Haro's profile of a bibliographer, Helen Tuttle, an acquisitions librarian, considers the duties too expansive and therefore impractical. "The suggested enlarged responsibilities for the bibliographer sound very stimulating", she comments, "but with such an assignment should go a twelve-hour working day, twelve days a week, if the bibliographer and his library are going to be satisfied with his work." (Tuttle, 1969:170-1). She is of the opinion that it is imperative to exploit the useful specialisation of the teaching staff, and not to expect an impossible range of duties which no individual can cover adequately in the time at his disposal.

Another cameo of a subject specialist, and certainly less demanding than Haro's, or even Gration's, is supplied by Robert Downs. After noting that many of the academic staff in a large number of university libraries have abdicated the responsibility for book selection to the library, he regards the bibliographical skills required by bibliographers to be competencies that can be acquired by intelligent, professional librarians who may in fact lack extensive formal training or subject specialities. (Downs, 1963:4-8).

Frederic Messick is also of the opinion that subject specialists need not be scholastics par excellence because the "librarian does not operate exclusively on the fuel of personal subject knowledge, but is, instead, concerned with the judicious use of someone else's resources as manifested in bibliographies and other available tools and by consulting regularly the best available 'experts on the campus'." (Messick, 1977:371). Messick regards the major advantage of subject specialists to be their ability to order titles, not in isolation, but with regard to how they may be used by the student in relation to other individual works, for it is the librarian rather than the academic who tends to receive the feedback from the users.

Another character sketch is provided by Sandhu who says: "The subject specialist's work is most important and most difficult, calling for a wide subject knowledge and for wise judgement". (Sandhu, 1975:67). In lieu of academic qualifications, he stresses personality requirements as he regards the subject specialist to be a public relations officer of the library. Not only must he be responsible for developing a well-balanced collection, helpfully organised, he must also "sell the library services to its users". Therefore, he "should have an outgoing personality and be able to get along well with and earn the confidence of various kinds of people. He should always be flexible, courteous, friendly and approachable." (Sandhu, 1975:64).

In cases where book selection is a joint endeavour with both the teaching staff and librarians involved, it does not seem necessary, despite some of the preceding excerpts, for subject librarians to have advanced degrees in subjects other than librarianship. The subject expertise is supplied by the teaching staff and the librarians, by virtue of the interdisciplinary nature of their field and objectivity, are able to supply the perspective and ensure the development of a balanced collection.

Gration and Young regarded subject specialists as being subordinate to a Director, or his equivalent, of Reader Services in the organisational structure. (Gration, 1974:28-34). Sandhu concurs. Messick however, recommends their administrative

independence, and suggests that they should be accountable directly to the University Librarian or Director of Library Services. His reason for advocating their independence stems from the likelihood of extraneous demands being foisted on them should they be attached either to reader or to technical services. (Messick, 1977:368-74).

The relevance of this survey to the question of allocation is summarised by Edelman, who writes: "Collection development is a planning function. A collection development plan or policy describes the short and long-term goals of the library as far as the collections are concerned ... From the collection development plan flows the budget allocation in broad terms." (Edelman, 1979:34). Whilst selection is the decision-making process concerned with implementing the above goals, the acquisition process implements the selection decisions.

EVALUATION

Another activity associated with collection development is evaluation, and Cowley's remark to the 2nd Blackwells Periodicals Conference at Oxford is pertinent. "Library allocations should not be a matter for campus politics, nor ill-informed secretive judgements, but should be related to thorough bibliographical research, library-faculty liaison, continuing evaluation of collections and an awareness of financial realities." (Cowley, 1977:90).

In evaluating a collection, what criteria may be used?

3.1. OVERVIEW OF EVALUATION TECHNIQUES

Writing in 1959, Rudolph Hirsch itemises four methods.

The first involves circulation statistics, though the author points out that arrangement of the stock on the shelves and the ready accessibility of the stock to the library's users by being conveniently located can distort the true picture.

The second method can be called impressionistic. This involves scrutinising the actual stock, and because of its subjective nature, its usefulness as a tool in evaluation depends on the calibre and competence of the personnel employed in the exercise.

Thirdly, holdings can be compared with checklists or bibliographies. Hirsch considers that this technique is of greater use in new or small libraries rather than in research ones. The reason for this lies in the fact that research libraries should be geared to the goals of their own institutions.

The final method involves the measurement of expenditure for library materials. This may be done by classes or in toto over a given period of time. Data from institutions of comparable size can be used as a barometer. Expenditure can also be related to the total size of the collection, or to annual additions to stock or to the institution's total budget. (Hirsch, 1959:7-20).

Being a solely quantitative approach, the evaluator must relate

the total expenditure to the quality of the stock as well, in order to assess whether the funds have been used advantageously. Hirsch concludes by saying that "intelligent book selection is the one way to assure maintenance of the high quality of a collection. Deterioration can proceed at a much quicker pace than growth." (Hirsch, 1959:20).

Writing fifteen years later, George Bonn also provides an overview of evaluation techniques and despite the passage of years, the similarity of methods, despite some refinements, is obvious.

Bonn identifies five reasonably distinct methods. Whereas Hirsch restricted himself to frequency of circulation, Bonn sees this as one of a number of statistical techniques. Circulation can, as Bonn explains, be sub-divided into classes. Proportionate circulation statistics compiled over a defined period of time provide a useful check on selection policies and acquisition rates when compared with proportionate holding statistics by subject class. The 'use factor' can be determined by the ratio of use to holdings in specific classes, both expressed as percentages.

Other statistical techniques noted by Bonn include data on holdings. This might involve gross size, though development, maintenance and exploitation of a collection taken together are more important. Other useful figures would include volumes added each year; comparisons done within the library at different times; subject balance and unfulfilled requests including interlibrary loan requests. (Bonn, 1974:265-304).

In this connection, G. Randall considers a library to be an "adequate literature resource needing only standard augmentation [if the collection] can supply 95% of the items required by the clientele." However, "if the library must go outside for 15% or more of its loans, it should increase its acquisition rate." (Randall, 1965:381).

Another useful statistic which is also covered by Hirsch is the record of financial commitment, which can also be used to monitor the amount being spent on different types of library materials, notably, the ratio between monographs and periodicals, both departmentally and overall.

Bonn, in mentioning the method of checking holdings against

lists or bibliographies does not restrict its usefulness to the small or new library. He feels its advantage lies in the availability of many comprehensive and specialised lists, a number of which are regularly up-dated and the vast majority are compiled by competent and experienced personnel.

Whilst adding the same proviso as Hirsch with regard to the actual examination of the collection, Bonn considers this method has several advantages. These include its practicality and immediate efficacy, as the shelves quickly reveal the size, scope, depth and significance of the collection on the one hand, and its obsolescence on the other. Another advantage lies in being able to identify areas of stock that are receiving either very heavy use or alternatively, very little.

His fourth method involves obtaining opinions from regular users, which he regards as providing the most potent feedback to the library's selection process.

The final method identified by Bonn is the application of standards. He sees this as having the advantage of the standards being tailor-made to suit the particular library and its parent institution's goals and objectives. Bonn observes that one of the most significant changes in standards since the 1940's has been the almost universal stress on quality rather than quantity as the decisive factor in making evaluations. It is this consideration which now tends to provide the frame of reference within which standards are applied. However, as Mosher says, "The issue is not one of subjectivity versus objectivity or quantitative versus qualitative measures; it is an issue of choosing the right methodological tools to produce the kind and quality of result needed." (Mosher, 1979:23).

3.2. STATISTICAL APPROACH

There are several advocates of the statistical approach and a number of examples where it has been used in evaluation.

3.2.1. GROSS SIZE

Verner Clapp and Robert Jordan emphasise gross size. Having considered the Standards for college libraries which were adopted by the Association of College and Research Libraries of the A.L.A., they found them inadequate for institutions engaged in advanced research programmes or offering doctorates. (A.L.A., 1959:274-80). These Standards provide for 50 000 carefully chosen volumes as a minimum for a library serving six hundred full time equivalent (F.T.E.) students, plus an additional 10 000 volumes for each additional two hundred students. Clapp and Jordan's formula attempts to take into account the principal factors which affect the requirements for books in connection with academic programmes and in which each factor is weighted in a manner capable of being related to and justified by practice. Therefore the factors they propose include:

- (a) differentiated student enrollment;
- (b) number of staff weighted by their involvement in research;
- (c) breadth and depth of the curriculum;
- (d) method of instruction, thus estimating reliance on, or independence of, the library;
- (e) availability of other suitable places for study on the campus.

Their formula presumes that the weeding programme is as active and realistic in relation to needs as is the acquisitions programme. This they gear at 12 volumes per F.T.E. undergraduate and honours student; 100 volumes per full time staff member; 335 volumes for each major undergraduate subject offered; 3050 volumes per master's field offered and 24 500 volumes for every field in which a doctorate is offered. Similar type formulae are provided for periodicals and government publications. (Clapp, 1965:371-80).

McInnis, as a result of using statistical regression analysis, concludes in his commentary on the Clapp-Jordan formula that it does not produce an over-prediction. In fact, for university research libraries, their guide is on the conservative side. (McInnis, 1972: 190-8).

George Snowball undertook partial tests of the Clapp-Jordan formula at Sir George Williams University, restricting the surveys

to social science and humanities monographs and periodicals in hard copy. Snowball found that if the validity of the 80/20 rule as defined by Trueswell (Trueswell, 1969:458-61) was accepted, there was evidence to support the validity of the formula as it applied to monographs. With regard to periodicals however, the survey demonstrated that the formula underestimated the number of titles and volumes required for an adequate collection. Snowball's criticism of both Clapp and Jordan and of McInnis is their lack of provision for obsolescence which can be incorporated in a formula by the inclusion of a 'devaluation' factor related to the age of the volume. (Snowball, 1972:487-8).

3.2.2. ACQUISITION RATE

If obsolescence is one side of the coin, then the acquisition rate is the other.

Fred Heinritz mentions that from the historical point of view, United States research libraries have, on an average over the three centuries of their existence, been doubling in size every sixteen years. (Heinritz, 1974:95-96). This corroborates the finding by Fremont Rider. (Rider, 1944:9).

Gordon Randall considers that in an established collection, it is necessary to replace 10% of the book collection each year if the average age of the titles is to be less than ten years old. An acquisition rate of 6% enables 90% of the collection to be replaced in fifteen years. (Randall, 1976:8-12).

Melvin Voigt regards the quantification of the accession rate to be essential if collections are to support advanced graduate education and research. He states "that in the university situation, when a reasonable start has been made in building an adequate research collection, first consideration must be given to maintaining a satisfactory acquisition rate - a continuous flow of currently published material - and that ultimate size must become a secondary concern." (Voigt, 1975:264). He goes on to assert that any formula which relates acquisition rates to numbers of students, to be "a totally unsatisfactory solution." (Voigt, 1975:265).

Voigt's model, based on a research university library, has, as a prerequisite, the division of current literature from that of retrospective materials as it is the current books and journals that have to be maintained at a relatively constant rate, whilst there is a degree of flexibility in how rapidly retrospective collections are developed to any determined level of adequacy. Danton, as it was noted earlier, also advocates placing the emphasis on current rather than on retrospective literature. (Danton, 1963:139-40). The basic principle underlying Voigt's formula with regard to current acquisitions includes the provision of continuing funds to enable the rates of acquisition of current books and journals relevant to the totality of the academic needs to be purchased. One factor to be borne in mind, however, is the role that can be played by library co-operation and the use of interlibrary loans. In his model, Voigt works out the current acquisition rate for a university which offers doctorates in three major languages, three social sciences, the four main sciences and in history, psychology and philosophy. His definition of currently published materials is books and journals published in the previous year or in the year received. For such an institution, the acquisition rate recommended for 1975 was 40 000 volumes. In applying his formula to the University of California at San Diego, established in the early 1960's, where he was University Librarian, the library would have been required to purchase 87 000 currently published volumes. (Voigt, 1975:263-71).

3.2.2.1. STUDENT ENROLLMENT

As noted above, Voigt considered student enrollment to be a fallacious factor in estimating acquisition rates and therefore library size. This view is supported by other writers.

William Randall, writing as early as 1931 stated "It appears obvious, for example, that the number of students enrolled in courses in economics in College A can have no possible effect upon the number of authoritative and necessary books published during a year in the subject ... it is easy to see that the size of the student enrolment is not a factor in the budget for these purchases. (Randall, 1931:421).

Edwin Reichard and Thomas Orsagh also regard student numbers to be negatively related. They do however concede that the number of staff is a major factor. (Reichard, 1966:478-87).

Other critics of the inclusion of student figures include Virgil Massman and Kelly Patterson, who wrote "Naturally the college with a larger number of students needs more duplicate copies, and it may also have a greater variety of programs. However, course for course, and major for major there is no difference in the number of separate titles needed by any institution ... ten students majoring in a subject area will need access to the same quantity of sources as one hundred students." (Massman, 1970:84). Their two criteria are therefore book production, i.e. title range, allied to specific courses in the teaching and research programmes.

Snowball too finds that the introduction of doctoral programmes has a very significant effect on the required size of the collection. This is of greater importance than the actual number of students registered, for "whether one or one hundred persons are involved, the same titles would be required." (Snowball, 1972:488). He however introduces some other factors. His guidelines include:

- (a) the level of service desired in terms of immediate satisfaction of demands for volumes;
- (b) the rate of obsolescence of volumes;
- (c) the publication rate of relevant material by level of content and discipline;
- (d) the need for multiple copies to satisfy coincidental demand for heavily used material.

Bonn in fact considers Snowball's formula to be more viable than either Clapp and Jordan's and McInnis'. (Bonn, 1974:265-304).

3.2.2.2. CIRCULATION

George Hodowanec considers the acquisition rate for any university library can only be justified in terms of the frequency of circulation and conversely, the acquisition of materials beyond the suggested rate of acquisition does little to increase circulation. In support of his contention, Hodowanec refers to a longitudinal study.

This showed that the rate of circulation of newly acquired materials drops off at a rate approximately equal to one-half of the previous year's circulation. His study also revealed that course related materials circulate more frequently than books that are not subject related to the programmes offered. A final conclusion drawn was that only a fraction of the collection meets the majority of user needs, thus indicating that as the collection size grows, the corresponding per student circulation does not increase at the same pace. (Hodowanec, 1978:439-47).

Hodowanec regards Voigt's formula as being too general and lacking statistical validity, thus displaying the same weaknesses as the Clapp-Jordan model. This criticism he supports by citing a survey that was conducted which determined the mean number of volumes per student in the collection sample to be 82,0 books, but the mean number of books issued, i.e. volumes per registered student borrower, was only 25,4.

Another advocate of the use of circulation data is Stephen Turner. He suggests the use of the last circulation date to estimate the proportion of books which are responsible for the determination of the circulation performance rate. He recommends the use of random sampling to conduct such a survey. (Turner, 1977:509-13).

A report on the use of circulation statistics to determine adequacy or otherwise of a collection is reported on by Richard Trueswell. The study was undertaken at the Technological Institute Library of Northwestern University in Michigan. The last circulation date within the date collection period was used as this was considered to be a more readily available statistic than trying to examine the total number of times each book in the library (even using sampling techniques) had circulated. The next step was to rank books according to the number of circulations, including a factor about range of use dates. The data obtained was plotted in a cumulative frequency distribution, the co-ordinators being the percentage of circulation versus time period. The information also provided the percentage of stock which did not move within the time period. The core collection was thus identified as those volumes

which had a last circulation date within a time period that corresponded to the satisfaction of 99% of user requirements. Trueswell also reports that when this methodology was used at Northwestern's Deering Library, it was established that 40% of the holdings satisfied 99% of circulation needs. (Trueswell, 1966:49-60). This was one of Hodowanec's conclusions as well, as noted earlier.

Another study involving circulation statistics and in-library use to measure effectiveness of stock was carried out by the Cambridge University Library Management Research Unit. The report was written by Schofield and others. The exercise was prompted by a recommendation of the U.G.C. under the chairmanship of Dr. T. Parry. (U.G.C., 1967:213-25 & 280-1). It was suggested that there should be a high percentage of immediate availability, and so this constituted the criterion used in the study. The university library chosen had a stock totalling 383 000 volumes and 357 000 loans, approximately half of which were issued by the undergraduate reserve book section.

The clientele consisted of five hundred and fifty staff members and about four thousand students in nine major faculties. The circulation and in-library use figures were sub-divided by subject and collection. In order to ascertain availability, the 'failure survey technique' was used. One thousand and thirty two readers were interviewed over a two week period regarding their success or failure to locate their requirements. Of these, six hundred and thirty one or 61% had looked for specific titles, one hundred and six or 10% had browsed or looked for unknown titles whilst two hundred and thirty three or 23% had been using materials which they themselves had brought into the library. The remaining 6% had either been returning books, using the photocopier machines or looking for friends. The survey showed that the reader failure rate was 37% made up of 5% due to titles not owned by the library; 12% due to reader error and 20% due to titles not being available. (Schofield, 1975:207-27).

A more comprehensive survey of a university research library was conducted by Fussler and Simon. This too was undertaken to determine availability of three categories of books. These included those actually used, be they for browsing, reference or circulation

and those that by statistical or related analytical techniques fell into groups that are likely to be used even though the individual books may have little or no use. The final category included those that did not fall into either of the above groups, but which experts would regard as relevant and important in a general research context. The criterion used in assessing availability was circulation. "Recognising that it is only one of many factors determining value, frequency of use was chosen as an index of the 'value' or 'usefulness' of a book." (Fussler, 1969:7). Although the study was conducted primarily at the University of Chicago, an analysis of circulation at other major university libraries, including those of Yale, Northwestern and California (Berkeley campus), was also incorporated in an endeavour to test the validity of the findings.

The study enabled the following conclusions to be drawn.

- (a) that although it is possible to predict the probable future use in a typical research library of a group of books with defined characteristics, the confidence limits of the prediction vary significantly from one subject to another;
- (b) that the compact storage of books which fall outside the three categories noted above can significantly reduce operating and capital costs from between 60-77% for conventional housing;
- (c) that past use over a sufficiently long period was an excellent and by far the best predictor of future use;
- (d) that within subject collections housed under comparable conditions, non-recorded use for groups of books categorised by relatively low recorded use was roughly proportional to the recorded use;
- (e) that browsing rather than the use of the catalogue or other bibliographical tools was responsible for the location of the majority of books;
- (f) that the most efficacious method of identifying journal volumes for storage was by starting with the oldest volume and selecting volumes consecutively until a volume showed some specific amount of use within a predetermined period of time;

- (g) that the rate of use of titles continued to decrease indefinitely with the age of the title. (Fussler, 1969:141-7).

3.3. COMPARATIVE APPROACH

Holdings may be checked against catalogues or bibliographies, or by comparing circulation with the shelflist.

3.3.1. BIBLIOGRAPHICAL COMPARISON

This method was used at the University of Colorado at Boulder, and described by William Webb. Sampling techniques were used in an attempt to compare the Library's stock against standard bibliographies in certain subject fields, notably mediaeval studies, history of art, political studies, physics and Slavic studies. In carrying out the survey, a 10% sample was taken when stock covered between one hundred to one thousand items; a 5% sample for stock numbering between one thousand and one and two thousand, and only a 1% sample for subjects with holdings in excess of two thousand. The result of the sampling provided statistical data which indicated the percentage of titles owned by the library. This enabled average cost estimates to be totalled and the amount needed specified. A follow-up test proved that the sampling technique employed was accurate to within 3%. (Webb, 1969:457-62).

Walker also regards the comparative technique to be a valid means of evaluation, although he considers that by itself, it may be insufficient. He suggests the comparison should not be restricted solely to titles, but should embrace other factors, such as size, level and policy selected as appropriate for the specific field. Another factor that should be included is the number of works held against the total number of works published in specific fields. He does point out however that geographical location affects the significance of a collection if it is the only relevant holding in a particular locality. (Walker, 1978:219-31).

3.3.2. CIRCULATION VERSUS SHEFLIST

In a survey aimed at measuring circulation according to the curriculum, McGrath classified each course in much the same way as a book. The class numbers thus generated were arranged sequen-

tially within each department. This was then used to determine the correlation between title range and books circulated and between one department and another. An additional advantage of such a sequence, says McGrath, is that it can be used to ascertain the total number of books published which have a direct relevance to the department concerned. (McGrath, 1968:347-50).

The findings of this survey demonstrated the correlation between circulation and curriculum oriented material. (McGrath, 1972-212-9).

In another article, McGrath suggests a means by which a library can test whether its overall buying programme coincides with demand. This is achieved by ranking correlation of circulation, shelflist holdings and current purchases. If a library's circulation is distributed among subjects in the same general proportion as the stock and as the library's purchasing programme, then the ratio between shelflist and circulation will indicate the richness of the stock. The ratio between circulation and purchases will indicate whether demand is being met and thus point to the relevance of the acquisitions programme. (McGrath, 1975:356-69).

McGrath's model was in fact slightly adapted for use at Ellen Clarke Bertrand Library of Bucknell University in Pennsylvania. The object of the study was three-fold:

- (a) to ascertain which departments made use of the collection;
- (b) whether recent acquisitions were proving useful;
- (c) to which disciplines books were more important.

Jenks reports on the survey. Each department was assigned a class or classes corresponding to its subject matter. Then the shelflist was measured using the figure of 120 volumes to the inch of catalogue cards. The last step involved circulation figures which were computed to show the percentage of total circulation by department as compared with the number of books by department. By ranking the departments in order of highest circulation compared to the department's portion of the collection, the departments which made most use of that part of the collection relating to their disciplines were ascertainable. Obviously in an exercise such as

this, student and staff enrollment has to be taken into account. (Jenks, 1976:145-52).

Another variation of the comparative technique is described by Daniel Gore. He comments on an exercise conducted at Macalester College Library in St. Paul, Minnesota, an undergraduate collection, where it was decided to determine three factors. The first was the Holdings Rate, which represented the percentage of all books the users wished to consult that were held by the library. The second, the Availability Rate, namely, the percentage of wanted books held by the library that were available on the shelves when the users required them. The third was the Performance Rate which was determined by the product of the Holdings Rate times the Availability Rate. Student kept diaries were used to arrive at the Holdings Rate. In these diaries, the results of all book searches throughout one term were recorded. A reader satisfaction survey was used to ascertain the Availability Rate. The results ultimately showed a Holdings Rate of 90% with an Availability Rate of 88%. This latter figure however was due to the prior implementation of a duplication programme, a shortened loan period and the installation of electronic exit controls. These alterations had followed on earlier surveys which had registered modest 58% and 70% Availability Rates. In an earlier article, Gore considered a Performance Rate of 45% as typical for a university library. (Gore, 1975:1599-604). As a result of these studies done at Macalester, together with the modifications prompted by them, the Performance Rate climbed from 52,2% to 63% to 79,2%. (Gore, 1978:933-7).

3.4. USAGE PATTERNS

Reference was made earlier to McGrath, who like Hodowanec, found a high correlation between subject oriented materials and circulation. McGrath conducted his study at the University of Southwestern Louisiana and the South Dakota School of Mines and Technology Libraries. In an endeavour to utilise more effectively the funds available for the purchase of library materials, and reduce the 80/20 ratio, he compared book selection and circulation to a

framework constructed from the two libraries' union catalogue of courses. This enabled him to monitor the collection. Using the classified course technique, profiles for each subject were delineated.

Three independent data samples were collected. An analysis of these revealed that the "profile does describe, within the limits of probability derived from the differences in actual and expected proportions, the books used; [and] this usage is clearly related to the subjects embraced by the university's academic departments; [and that] the profile is therefore a valid predictor of usage." (McGrath, 1972:217). The findings suggest that if a library owns more books for which the classification numbers match those of the teaching programme, then a greater proportion of the library's stock would be used. He continues by suggesting that such classification profiles should be used not only as a selection aid but as an actual criterion. (McGrath, 1972: 212-9).

Support also comes from Grant, who found that "with very few exceptions, students are apparently checking out only books that are curriculum oriented in the most narrow sense, i.e. books which they need to use in writing term papers." (Grant, 1971:70).

Looking at the situation from a different angle, a survey conducted at Columbia University Libraries was reported on by Mount and Fasana. They found that 14% of the post-graduate students accounted for 37% of all reserve books issued, whilst 25% of the post-graduate population borrowed 53% of the open stack material. Overall, it was calculated that about 40% of the users accounted for 70% of the circulation. (Mount, 1972:199-211).

Peter Mann, a sociologist at the University of Sheffield, reported at a meeting designed to cope with financial cuts, that his own research demonstrated that "there is a lot of evidence indicating that students get degrees with little reading." (Mann, 1977:35). His survey revealed that during the latter part of the Lent term, 35% of students had no books on loan from the university library, that even 41% of Arts students had not used the undergraduate reserve book library that final term of the academic year, and 16%

had not used the university library at all for borrowing books. (Mann, 1977:24-38).

Allen Kent, in a study conducted at the University of Pittsburgh Libraries, came to the same conclusion as Hodowanec and McGrath with regard to periodical usage. This he also found to be highly discipline-oriented, with virtually no cross over among the major users. Other factors that came to light related to periods of heaviest usage. It was found that the greatest demand for a book occurred in the first two years after publication and that if it had not circulated within five years, it was not likely to move at all. Periodicals, it was found, had a longer utility span. Titles less than five years old represented 80% of the circulation in physics, 66% in the life sciences and psychology and 76% in engineering. A disturbing feature however was that students were not consulting many of the expensive journals to which the library subscribed. In fact, the engineering students used only 9% of the periodicals bought for them, physics students 37% and the life sciences and psychology students, 22%. (Kent, 1977:1438).

Harry Kriz throws further light on the library habits of engineering students. At a survey undertaken at West Virginia University College of Engineering, it was demonstrated that the post-graduate students at masters' level were more dependent on an adequate book collection than on a large number of periodical subscriptions. In fact, the citation ratio was 66 : 33 in favour of monographs. (Kriz, 1978:105-9).

As most of these user study surveys were based on circulation, one of Fussler and Simon's conclusions should be reiterated. This was the relationship between recorded and non-recorded use in subject collections housed under comparable conditions.

Another study done in this area is reported by C. Harris. The survey, which lasted nineteen months, was undertaken at the Newcastle-upon-Tyne Polytechnic. The conclusion arrived at was that the number of in-library or normally non-recorded uses that were counted were very closely associated with the number of issues. An example of this was seen in the 300's which was the class most heavily used within the library and came second in the circulation

statistics. The 000's were third in both lists, and the 400's and 200's were near the bottom on both lists. Thus it was felt that circulation statistics could be used as an indicator of total use. One other factor that emerged from this study showed that 49,2% of the total bookstock had neither been issued nor used in the library. (Harris, 1977:118-20).

McGrath reached the same conclusion after conducting two studies at the University of Southwestern Louisiana. The first study involved the counting of books, not only those issued, but also those left on tables, chairs, etc., within finely delineated classification spans which related to the sixty three departments at the University. The second study also involved a count of books, but within broader classification spans, thus making it non-departmental. The conclusion arrived at showed that "circulation totals, when grouped into self-delineating spans, can be reliable indicators of the subjects being used within as well as out of the library." (McGrath, 1971:285). The ratio of out-of-library and in-library use averaged 2 : 1.

In defence of the students, Charles Clarke, himself a student, also addressed the conference, along with Peter Mann, giving some reasons for students not using books as widely as they could or should. He attributed this phenomenon to the fact that books and learning materials available in the libraries were not directed in a general sense towards the courses and academic activities which went on at university. He conceded that although reading lists may be prepared, the relationship between books and courses was not as sharp as it should be. He suggested a much higher level of course planning and a greater utilisation of the libraries by each of the courses. (Clarke, 1977:40-50).

Thus Clarke, although he puts the onus on the teaching staff, reinforces the premise postulated by McGrath, Hodowanec and Kent, that curriculum-oriented materials are the ones most likely to be used by the student population. One is not however advocating that the entire library budget should be devoted solely to course-related materials, as the university has a wider function to play in the community, but these findings should be considered.

Mosher summarizes some of the benefits of a well planned programme of evaluation. These include:

- (a) A more accurate understanding of the collections, including scope, depth and utility.
- (b) A guide and basis for collection planning.
- (c) An aid to the formulation of a collection development policy.
- (d) An effective measuring device as to relevance of collection development policy.
- (e) A means of determining collection adequacy.
- (f) A method of rectifying inadequacies and therefore improving holdings by focusing human and financial resources on these areas.
- (g) A justification for increased book budget.
- (h) A "raison d'être" for administrators. (Mosher, 1979:16-32).

The final word comes from Michael Moran, who recognises the merit in evaluation of a collection. He does however see a fundamental flaw inherent in all models. This lies in their attempt to impose a uniform quality upon the educational output of all universities where in reality no such uniformity exists or can exist. He also queries the ability to judge adequacy or a lack of it with regard to library collections. His doubt stems from the fact that adequacy, being quantitative, cannot be meaningfully applied to a collection's contribution to education, which is essentially qualitative. (Moran, 1978:85-93).

CHAPTER 4

JOURNALS

In view of the proportion of the library materials budget that is earmarked for the payment of periodical subscriptions, and the fact that the inflation rate is escalating with unremitting momentum, it is essential that attention be paid to subscriptions, both from the point of view of whether the subscription is justified, and, if the institution has a general periodicals fund, out of which subscriptions are paid, the implication thereof of any budgetary formula or guidelines that might be applied.

4.1. INFLATIONARY TRENDS

Indicative of the inflationary trend in the cost of journals, are the figures cited by Norman Brown. Three thousand, two hundred and fifty five titles were examined and the average subscription price of \$27,58 represented a 12,2% increase over 1977, which figure showed a 9,2% increase over the average for 1976. The average price mentioned above hides the tremendous range in actual subscription rates, which in fact go from \$6,34 (the average price for children's periodicals) to \$108,22 (the average price for chemistry and physics journals).

What is also of interest is the fact that in the majority of the twenty four categories listed, 20 - 35% of the titles registered an increase in price during 1978, whereas 63,6% of the chemistry and physics periodicals were increased; 52,4% of the medical journals and 43,1% of the mathematical, botanical, geological and general science ones.

Also listed are the major American publishers of academic journals, covering a variety of subjects and price ranges. Pergamon Press, who published sixty three titles in 1978, the highest output of the twelve cited, also registered the highest percentage increase of 38,4%. The American Psychological Association maintained their 1977 prices and the next lowest was the University of Chicago Press whose journals went up by only 6,6%.

In 1977 however, Pergamon's increase was only 2,8%; the American Psychological Association 4,6% and the University of Chicago Press 15,6%. The average percentage increase over the twelve was 16,2% in 1978, whilst only 9,4% in 1977. (Brown, 1978:1356-61).

Herbert White and Bernard Fry look at the reasons underlying the increases. They say that whilst librarians consider the price hikes to be exorbitant, the real villains are seen as being the publishers who are attempting to make unreasonable profits. The publishers, on the other hand, are concerned about the impact of networks, the extension of interlibrary lending and borrowing and photocopying. The report compiled by the authors covers the period 1969 - 1973 and was based on a survey of two thousand, four hundred and fifty nine American journals. The conclusions arrived at vindicate the publishers, who it was found, were not using price strategies to make unfair and unreasonable profits. Commercial publishers reported an operating profit of close to 14% which is reduced to a net profit of slightly less than 6%. Society publishers, on the other hand, just about broke even, whilst university presses were showing consistent and growing deficits. What did emerge from the survey was that the publication of journals in certain disciplines, notably the humanities, was a non-viable proposition and therefore could not be supported from sales without some form of subsidy. Interlibrary loans and photocopying however, did not adversely affect the totality of the scholarly journal/library relationship.

It was noted that at the beginning of the study, academic libraries were spending twice as much on books as on periodicals, but were then forced to transfer funds from books to journals in order to maintain their periodical collections. By 1973, the ratio between books and periodicals had dropped from 2 : 1 in 1969 to 1,16 : 1 and it was probable that by 1975 the journal budget would exceed the book one.

Rather than cancel subscriptions, academic libraries tended to restrict the addition of new titles and only half as many titles were added in 1973 as had been in 1969. By contrast, special libraries cancelled subscriptions at more than three times the

academic rate, which had been 0,2% in 1969 rising to 0,7% in 1973. This was done to enable them to maintain a steady 5% rate of new titles. (White, 1977:109-14).

4.2. USAGE PATTERNS

4.2.1. SCIENTIFIC AND TECHNICAL JOURNALS

Paula Strain notes that the limits of expansion are usually apparent earliest in the periodical holdings of industrial libraries as a consequence of current technical data being published first in scientific and technical journals. A study was conducted at IBM Electronics Systems Center Library, which concentrated on titles requested, date of issue and number of requests. It was found that 34,8% of total usage was for current year periodicals, 19% for the previous year and 11% for the year before that. 80% of all requests were for journals published within the preceding five years. It was decided, as a result of the study, which also demonstrated that the list of journals most frequently cited in Physics Abstracts did not necessarily co-incide with those most regularly used at IBM, that "selective retention of periodicals is most economic. Borrowing material infrequently used from another library or paying a fee for the privilege of a photocopy is as satisfactory and much cheaper than storing long runs of periodicals with very infrequent use." (Strain, 1966:303).

Herman Fussler, in a historical survey had also observed the trend towards the use of more recent literature amongst chemists and physicists. Surveying the pattern between the years 1899 to the 1940's, he noticed that in 1899, 58,79% of all journal references in the field of chemistry were to material issued within ten years prior to the date of publication. By 1939, the percentage had risen to 71,26%, and whereas fifty years included more than 90% of citations in chemistry, twenty five years was adequate in the case of physics. The conclusion drawn therefore was that the bulk of the literature used for research purposes in physics was more recent in date than that used in chemistry. There was however a difference when monographs were reviewed, as twenty five years

was sufficient to provide 90% of all citations in chemistry, whereas the non-serial period for physics was somewhat longer than that for journals in physics. (Fussler, 1949:119-43).

Fussler also maintains that inclusive holdings, that is from the first issue to date, of some titles, is less useful to research staff than selected partial holdings of a larger number of titles, changed at more frequent intervals, especially where the resources in space or in acquisition funds are limited. He concludes by saying that

"the distribution of literature, as revealed in the study, indicates that provision of a substantial proportion of the references in a research field is possible through a small number of journals if they are properly selected, but that the provision of the entire necessary research literature for a field will require a very large number of titles, many of which will be needed elsewhere in a university or in a large research organisation." (Fussler, 1949:140).

The 'half-life', that is the time during which one half of all currently active literature was published, with regard to technical periodical literature is given for a number of subject areas by Burton and Kebler. These are 3,9 years for metallurgical engineering journals; 10,5 years for mathematics; 4,8 years for physics and chemical engineering, and 11,8 years for geology. (Burton, 1960: 18-22). Fleming and Kilgour agree on 5,0 years back as being the point of obsolescence in bio-medicine. After this period, less than 15% of all use occurs. (Fleming, 1964:234-51).

Physicists predeliction for English language journals, when domiciled in an English speaking country is noted by Ruth Hooker. She found that 66,37% of periodical references in physics were to English titles, 26,65% to German and 3,02% to French. (Hooker, 1935:333-8).

Another feature warranting mention was demonstrated in a study that took place at the Engineering-Transportation Library at the University of Michigan. This study was motivated by a budget crisis, reports Holland. The results showed that 80% of the user needs were supplied, not in fact by 20% of the titles as postulated by Trueswell (Trueswell, 1969:458-61), but by a meagre 10%. In

actual title numbers, this meant that one hundred and sixty of the one thousand six hundred bound periodical titles fulfilled the majority of requests. 50% of current journal use was supplied by a mere twenty five titles. It must be pointed out however, that the little used material included donations, exchanges and foreign titles to a significant degree. (Holland, 1976:543-7).

4.2.2. SOCIAL SCIENCE JOURNALS

Wood and Bower report on a survey of social science periodicals that was carried out over a four week period in 1968 at the National Lending Library. The aim of the study was to ascertain information on the users of the literature, the major periodicals in demand, the date and language characteristics of the material required and the sources used to obtain the references. The results showed that 75% of the requests stemmed from universities and industrial organisations. The subject area most in demand was management literature (27,5% of all requests) with psychology (14,6%) second. Whereas Hooker had found that 66,37% of physicists opted for English language journals, the percentage of social science requests in English was 98,4%. French, in this case, was the most popular of the foreign language journals. Only in geography was there any appreciable use of foreign literature.

The 'half-life' of social science periodicals was found to be 3,5 years and more than 93% of the journals requested had been published within the preceding eighteen years. In the field of management and education, 67% and 58% respectively of the requests were for literature published in the previous 3,5 years and 87% for items published during the preceding 8,5 years. 52% of geographers, 45% of psychologists and statisticians and 38% of sociologists requested literature published prior to 1960, i.e. eight years previously. This compared with 26,1% of the whole sample. There was a definite bias towards more recent literature in the areas of politics, law, administration, social welfare and commerce.

In the social sciences, it was found that seventeen titles accounted for 20,2% of the requests, and one hundred and sixteen for

55,7%. Broadly speaking, the social scientists relied more on personal recommendations as their source, because only 21,3% used abstracting and indexing services. This compares with 43% of natural scientists and technologists and 31,5% for doctors and medical personnel. (Wood, 1969:108-22).

In another survey, restricted to education and psychology at Ohio State University, other factors came to light. Perk and van Pulis describe the study, which was undertaken to identify little-used materials. The means employed was the use of circulation records covering the previous ten years of the eight hundred and four periodicals under review. As these were kept in closed access, accurate records could be maintained. Once again, the results supported previous studies by proving that the most current issues were the most heavily used. In this instance, eight years holdings provided 90,6% of the circulation and five years accounted for 75,6%. What was also observed was the effect of binding on usage patterns as this tended to remove items from circulation at their point of highest demand. This fact reinforces a statement made by Raisig to the effect that it is the librarian's primary duty to make periodicals available and his secondary duty to preserve the contents by collecting and binding them. He therefore advocates a delay in journal binding of two or three years following publication which he considers might make more articles more easily available to more users. (Raisig, 1967:399-407). Unfortunately, practicalities such as deterioration and theft do not always make this a feasible proposition.

Perk also found that one hundred titles, that is one eighth of the periodicals currently received, were responsible for 72,4% and one hundred and fifty journals for 83,8% of the circulation. Other factors that emerged showed that 23,9%, i.e. just over one hundred and ninety periodicals, were not used at all, while 48% were borrowed no more than five times during the period of the study, which lasted one year. It was also found that of the three hundred and sixty titles which circulated in excess of eleven times, 93,6% were indexed by at least one of the major indexes in the field. Only thirty four of the one hundred and ninety two

journals which did not circulate at all were indexed. This contrasts with the finding by Strain referred to earlier where there was very little correlation between citation and circulation. (Perk, 1977:304-8).

4.2.3. HISTORY JOURNALS

The historians' use of periodical literature was the subject of an article by Clyve Jones and others. Seven thousand references in the field of English history were analysed and the results showed a much higher reliance and use of non-serial publications than of periodicals, though there was significant concentration on a few core journals. In fact, 80% of the references referred to 20% of the titles. Once again, journals in foreign languages were rarely cited, the percentage being 7,7%. The period of English history was an influence in the use of periodicals, as seen in the following table:

Mediaeval period	: 20,2% of all references;
Early modern period	: 17,3% of all references;
Later modern period	: 39,1% of all references.

The pattern of age distribution of references suggested that secondary historical works became fairly rapidly obsolescent, whereas primary sources retained their value indefinitely.

The authors conclude by showing the dependence on monographs, periodicals and manuscripts in a number of disciplines which are relevant to a university.

Subject	Monograph	Periodical	Manuscript
Fine Arts	71,4	-	-
Music	69,5	-	-
United States history	45,6	9,2	10,3
English history	34,1	21,5	10,9
Social science	46,0	29,0	3,0
Sociology	45-56	33-40	-
Science	12,0	82,0	-
Chemistry	5,2	92,7	-

(Jones, 1972:137-56).

4.3. CRITERIA USED IN SELECTION AND EVALUATION

Subramanyan mentions the three criteria most generally used in journal selection and evaluation, together with their major

drawbacks.

The first is the number of source items contained in a journal in a specified period of time. This provides a quantitative measure of its importance. Unfortunately however, it does not indicate the quality of the source items. Another factor that distorts the picture is the size and frequency of journals which vary considerably. Thus, although the number of source items may have little value in isolation, they can be a valuable supplementary measure when used in conjunction with other criteria.

The second is volume of use, derived from circulation statistics, in-library use, photocopying and interlibrary loan records. Alan Singleton, in commenting upon 'use lists', employs the term 'parochialism' to denote the dominance of American publications in United States surveys and United Kingdom periodicals in British studies. This also accounts for the virtual absence of foreign language journals in lists of periodicals most frequently used. (Singleton, 1976:258-89).

The third criterion is frequency of citation in other primary journals. Unfortunately, here again, there are several disadvantages inherent in this method. Firstly, it assumes that the value of a periodical to a researcher is in direct proportion to the number of times it is cited in the professional literature. Secondly, it assumes that the journal or journals used as the base for tabulation are representative of the entire field. The third disadvantage is one found in the first criterion mentioned, viz., the variations in journal frequency and size, which can invalidate the results. Finally, citation may result from a controversial statement, or an author's reputation, or be facilitated by the dissemination of reprints, or by virtue of the language in which it is written. (Subramanyan, 1975:367-71).

The disadvantages of using citation frequency as a sole criterion in both selection and evaluation are also noted by Charles Brown. He advocates its combination with recommendations by specialists and library staff; opinions of librarians at other institutions; reviews, and the checking of the title or titles against lists of most frequently cited journals. (Brown, 1956:3 & 11).

Another critic of citation analysis is Alan Singleton who whilst conceding that it provides a "quantitative and computer-manipulable measure" (Singleton, 1976:260) and "a useful technique for examining journals in general, mapping trends in those journals or literature as a whole or of a particular country" (Singleton, 1976:272), concludes by saying that although "citation analysis is an attractive concept for libraries, its use and value are severely limited." (Singleton, 1976:272).

Pauline Scales is also an opponent. She reports on a comparison that was made between ranked lists of the most used periodicals according to the results of a survey undertaken at the National Lending Library and the most cited journals as given by the Journal of Citation Reports for the years 1967 to 1969 inclusive. Of the one thousand five hundred and seventy one journals which appeared in the final listing for frequency of use, only eight hundred and eighty of them were among the most cited periodicals. In fact, only one journal, viz. Science, appeared among the five most used and five most cited, and it was found to be necessary to consider more than two hundred and fifty journals before even 50% occurred in both lists. Scales goes on to comment that as a result of the very small degree of correlation between citation ranking and actual use, it is doubtful if citation rankings constitute reliable guides even to core journals without the additional knowledge of the degree of use to which the journals are put. (Scales, 1976:17-25).

Harry Kriz, whilst acknowledging the limitations inherent in the use of citation data, nevertheless considers that they do provide useful guidance in budgeting decisions. (Kriz, 1978:105-9).

Subramanyan sums up by saying that a common limitation to all these bibliometric measures used to assess the relative importance of journals, is that they are all dependent on the availability of the journals to the users. They do not reflect quality. (Subramanyan, 1975:367-71).

4.3.1. EVALUATION IN ACTION

A comprehensive evaluation of periodical holdings was conducted at James Madison University in Harrisonburg, Va., in the early 1970's and is described by Bolgianó and King.

The profile of the periodicals collection was composed of four major elements. These included:

- (a) Data on the library's one thousand eight hundred and seventy five currently received journals.
- (b) Data on the periodical holdings supporting each of the twenty six academic departments.
- (c) An analysis of interlibrary loan periodical transactions for the preceding year.
- (d) An analysis of journal citations in all master's theses in three academic departments over the preceding five years.

The theses were restricted to three departments because these had the most vigorous graduate programmes. The first phase of the study consisted of an attempt to gain an overall view of current periodicals in three ways:

- (a) By defining the extent to which they were accessible through indexes and abstracts available in the library.
- (b) By comparing the holdings with recognised bibliographies.
- (c) By delineating the back run situation for each title.

The information collected from this exercise not only gave an accurate and detailed picture of the stock, but also demonstrated the strengths and weaknesses according to discipline.

The second phase focused on the support the current titles gave each department. The authors mention that this proved extremely difficult because of the interdisciplinary nature of many journals. For each department, three lists were prepared. One listed the titles assigned primarily to that department together with the expiry date and subscription price. The second itemised the titles supportive of that department's programme. The final list gave the supportive titles which were received either as donations or on

exchange. The response varied but an offshoot of this phase was the cancellation of forty two titles.

The third major element, viz. the analysis of interlibrary loan requests, concentrated on the outgoing ones. This phase was designed to investigate the type of users, thus indicating research level; the subject areas in which periodicals were most frequently requested together with the number of requests for individual titles. This information would point to weaknesses in the domestic collection and the possible need not only to enter a current subscription but also back issues. The results indicated that science and technology journals constituted the greatest percentage of requests. This confirmed the earlier finding in which strengths and weaknesses were identified.

The final phase involved the analysis of periodical citations in theses. This was designed to measure the research value of the journal collection to post-graduate students. The information sought included the percentage of citations available in the library and the identification of journals cited most frequently to which the library had current subscriptions but not the required back issues. This would indicate the extent to which the need for periodical literature was met from stocks held by the library, and the need to build up back runs. The authors felt that as a result of this exercise they were in a position to guide requests towards a better balanced collection and one that supported, in a realistic way, the curriculum. (Bolgianó, 1978:99-104).

4.4. CANCELLATION SURVEYS

A survey aimed at pruning periodical subscriptions was carried out at Reading University. James Thompson, himself the University Librarian, describes the procedure followed. He started off by writing to each faculty asking for suggestions for cancellations. Accompanying this request was a list of periodical titles selected for an initial scrutiny on the basis of four criteria:

- (a) Titles which, because of inflation, had become very expensive.
- (b) Very expensive titles for which there was little evidence of demand.

- (c) Expensive foreign language journals for which a more wanted journal might be substituted for the same subscription rate.
- (d) Titles which had been initiated by a member of staff who was no longer at the university.

Each faculty was asked to search out the marginal, the extravagant and the obsolete, and as a result of academic co-operation, the necessary cuts were made which enabled the library to keep within its budget. (Thompson, 1977:7-23).

Librarian/academic co-operation was also used at Glasgow University, according to Elizabeth Rodger. The period of reckoning occurred at the beginning of the 1976/1977 academic year when it became necessary, primarily as a result of inflation, to prune the subscriptions by at least 15%. The Library Committee, in fact, was endeavouring to limit expenditure on periodicals to 38% of the library materials budget, so the initial step was to prohibit all new subscriptions. Of the eight thousand five hundred serials to which the University subscribes, 53% were purchased as periodicals, i.e. four thousand five hundred and five and of these, 62% were included in the survey, which lasted over a period of four months.

Two approaches were adopted. Firstly, readers were asked to initial forms attached to the front of each issue every time they consulted one, and secondly, lists of periodical titles, sub-divided into fifty seven subjects were circulated to the academics for grading into four categories. Response indicated 58% to be regarded as essential; 25% as desirable; 13% as useful and 4% as redundant. As a result, a list of one hundred and forty eight titles, with no recorded use and which had received the 'cancel' grading or no grading at all (indicating that no department was interested) was drawn up and circulated.

This gave the academics an opportunity to re-assess the original gradings and in fact thirty three titles due for cancellation were reprieved. The one hundred and fifteen titles subsequently cancelled however, only represented a very modest 2% saving, so it was decided to impose cash limits and the faculties were provided with subscription rates; results of the user survey and the departmental ratings,

in an endeavour to achieve a further 13% saving. This action stimulated the teaching staff into approaching Senate who were then persuaded to make a supplementary grant to the library which meant that only a 5% instead of a 15% cut was required. Future policy however, requires cancellation of an existing subscription of comparable cost before a new title is ordered. (Rodger, 1978: 145-53).

Reporting to the 2nd Blackwells Conference, Miss Carrein stated that at Newcastle University the periodicals budget in 1975 represented nearly 60% of the library materials budget and it was felt that a 50 : 50 balance should be maintained so that the money available for book purchases was not progressively eroded by committed expenditure on journal subscriptions. With this in mind, classified lists of current titles were circulated to all departments who were requested to 'claim' titles relevant to their studies. The returned lists were collated on a master list and a profile of departmental interests in current titles was obtained. Classified lists were again distributed, showing not only departmental interests but also subscription rates and additional titles and recommendations for new titles. The total share per department of the periodical budget was calculated by adding up the price codes of claimed titles. Codes were divided equally when more than one department claimed a title. The departments were then asked to reduce their share of the budget by indicating titles for cancellation on four levels. These were A level, which would produce an overall reduction of 15%; B of 25%; C of 35% and D of 45%. In order to assist them in categorising their titles, the holdings of the Newcastle Polytechnic were included. A list of titles for cancellation was drawn up, comprised predominantly of A and B gradings, but including only those where all interested departments had agreed to cancel. The exercise, which lasted over seven months, resulted in a 22% reduction in expenditure. (Carrein, 1977:96-102).

A survey was also conducted at the R.E. Gibson Library, Applied Physics Laboratory at Johns Hopkins University. It was motivated

by the information explosion, particularly relevant to the sciences; by inflation, which has also hit the sciences to a greater extent than the humanities; by an increasing trend of diversification in research; by subscriptions exceeding their budget and by the physical confines of the library. It was thus decided to gauge how effectively the holdings contributed to the Laboratory's research activities. Langlois and von Schulz describe the procedure followed. Several questions were initially posed:

- (a) Which journal titles could be discontinued?
- (b) Which holdings could be converted to microform without inconveniencing researchers?
- (c) Which holdings could be moved to storage, with the same proviso?

Because of the operating policy of the library, the methods to determine periodical usage employed at many other libraries, such as photocopy request counts, circulation statistics, questionnaires, analysis of periodicals reshelfed, were precluded. Instead, a mimeographed card was attached to the most recent issue of each of the five hundred journals being reviewed. Subscriptions to the three hundred abstracting, indexing, reference and current awareness publications were not included in the survey. Each time the journal was used, the researcher was asked to mark the card, and as new issues were received, the cards were transferred to them. In order to collect data on non-current issues which were consulted in the library, the library staff recorded each title and the year of publication prior to re-shelving. In addition, reprints of journal articles by members of the staff over a three year period were counted, so too were citations of library holdings and internal requests for photocopies.

The information collected enabled the library to decide which titles warranted renewal; which journals could be stored or converted to microform, and after a list of journal titles in descending order of frequency of use was compiled, the research staff were requested to mark those with which they were familiar according to their degree of usefulness. As a result of the survey, forty nine subscriptions were cancelled, which represented a cost saving

of 6% on the periodical budget and an additional 7,5% of shelf space was released. (Langlois, 1973:239-44).

Marion Reid reports on a survey conducted at ten other American universities, including, inter alia, Columbia, Cornell, U.C.L.A., and Purdue. In four cases, the periodicals consolidated fund was dissolved, each title being attributed to a subject fund together with an appropriate portion of the fund to cover the cost. In this way, each department was made responsible for its own subscriptions and were compelled to cancel existing subscriptions in order to obtain the necessary funds to order new or alternative titles. The study also demonstrated the degree to which co-operative acquisition policies were being practised, as eight of the ten universities were involved to a greater or lesser degree. These ranged from the exchange of main entry cards to involvement in the sophisticated co-ordinated acquisitions programme being developed by the Research Libraries Group, members of which are becoming increasingly dependent on the Center for little used titles. (Reid, 1976:266-72).

South Africa has not escaped the effects of inflation, and thus it is equally imperative for us to re-assess our periodical holdings if the library materials budget is not to be squandered on periodicals that are not consulted, or on back runs, where studies have shown the degree of use to be so minimal that inter-library loans constitutes a viable alternative.

RESOURCE - SHARING

As mentioned in an earlier chapter, Marion Reid found that of the ten American universities surveyed (and incidentally all of them with library materials budgets exceeding \$1 million and in the case of three of them - U.C.L.A., Cornell and Columbia - in excess of \$2 million for the 1977 - 1978 financial year), eight of them practised some form of co-operative acquisitions in an attempt to cope with budget adversity. (Reid, 1976:266-72).

In fact it is not only financial stringencies which make co-operation imperative but the knowledge explosion which it is estimated produces a 5 - 15% annual growth rate in the world's output of publications. Thus, as Richard de Gennaro says "the goal of self-sufficiency or even comprehensiveness is unrealistic and unattainable." (de Gennaro, 1975:918). He advocates the search for ways and means of achieving a new kind of orderly and healthy growth pattern which is more commensurate with the resources and needs of each institution, as he regards it fallacious to equate high expenditures, high growth rates and large collections with library effectiveness. He feels that the traditional emphasis on developing large local research collections must be shifted towards developing excellent local working collections and effective means of gaining access to needed research materials wherever they may be. Thus there should be a switch from processing materials to serving readers, i.e. "from holdings to access." (de Gennaro, 1975:920).

5.1. HISTORICAL EVOLUTION IN THE UNITED KINGDOM

The concept of library co-operation is not a new one. George Jefferson gives a resumé of its historical development. (jefferson, 1977). Suggestions for co-operation as a means of co-ordinating the resources of individual libraries were voiced at the start of the present century by people outside the library profession. One of these was Sidney Webb, who addressed the

Library Association in 1920 on "The Library service of London : its co-ordination, development and education;" (Jefferson, 1977: 13-14). The common denominator in nearly every suggestion was the need for a central library authority which would be in a position to co-ordinate the activities of libraries. The Central Library for Students (CLS) was established in 1916 for an experimental period of five years and in 1919 it received further impetus when, as a result of the third interim Report of the Adult Education Committee of the Ministry of Reconstruction, it was recommended that it should be the nucleus of a state-aided Central Circulating Library, which would lend to the public libraries the larger or more expensive or more esoteric books which they could not afford to buy. With the formation of the Association of Special Libraries and Information Bureaux (Aslib) in 1924, a co-ordinator for special libraries was born. The following year, the universities established a system of library co-operation when a Joint Standing Committee on Library Co-operation was appointed. Another milestone was the publishing of a report in 1927 under the chairmanship of Sir Frederic Kenyon which recommended that:

- (a) a national system built on voluntary co-operation should be established;
- (b) that public libraries should be grouped around regional centres;
- (c) a federation of special libraries be organised;
- (d) and at the apex, a central library which would act as a centre for the whole system. (Kenyon, 1927).

Thus the CLS was transformed into the National Central Library (NCL) on whose Board of Trustees sat representatives from the British Museum, the Library Association and the Carnegie United Kingdom Trust (CUKT). The NCL was entrusted with, inter alia, the supply of bibliographical information and the preparation of a union catalogue. Between the years 1931 - 1945, the NCL consolidated its position as a national centre for the loan of books, and for interlending between libraries linked with a system of Regional Library Bureaux which existed throughout England and Wales.

The McColvin Report in 1942, whilst making a critical analysis of existing co-operation and revealing deficiencies, made constructive suggestions which had a major influence on post-war thinking. (McColvin, 1942). The 1950's and 1960's saw further developments in co-operation at three levels, the national, regional and local. In 1961, the National Lending Library for Science and Technology (NLL) was opened at Boston Spa in Yorkshire, and on the regional level, the Inter-Regional Coverage Scheme was introduced in 1959, whereby each region undertook the coverage of books listed in the British National Bibliography (BNB) within a certain section of the Dewey classification scheme. However, the establishment of the British Library in 1972 put paid to the Inter-Regional Coverage Scheme as it was absorbed, along with the NCL and NLL, into the British Library Lending Division (BLLD) as the concept of a central lending library overtook that of interlibrary lending. The BNB was also incorporated into the structure as the Bibliographical Services Division, and the library departments of the British Museum and the National Reference Library for Science and Invention formed the British Reference Library, and finally, the Office of Scientific and Technical Information was brought under the umbrella of the British Library as the Research and Development Division.

With regard to academic libraries, the post World War II years saw the formation of the Standing Conference of National and University Libraries (SCONUL) which has been entrusted with the promotion of the work of its members. One of the more important examples of SCONUL's role as a co-ordinating body is in the acquisition of foreign literature.

The Parry Report of 1967 again stressed the need for co-operation by recommending that the entire resources of a geographical area should be regarded as a pool from which individual libraries could draw, thereby extending coverage and reducing expenditure. University libraries within an area were charged with avoiding unnecessary duplication of effort by investigating the benefits deriving from all forms of co-operation. (U.G.C., 1967).

One such example is the 'Newcastle experience' reported on by K. Harris. He enumerates the general maxims of co-operation as including the personalities of the people involved. He points out that co-operation works only so far as the individuals allow it to work and stresses the deleterious effect petty rivalries have on co-operative efforts. A further fundamental principle is the need for knowledge and an appreciation of each other's strengths and weaknesses. He considers proximity of co-operating libraries to be desirable; that co-operation begets further co-operation, but that a co-operative scheme has failed if it saves money. (Harris, 1973:147-9).

The Newcastle-upon-Tyne co-operative programme is an inter-typal network, involving the University, the Polytechnic, the City Library and the Literary and Philosophical Society, which joined forces to form the Newcastle Libraries Joint Working Party.

The group started by choosing methods which were designed to enrich rather than dilute personality, so it was decided from the start that a uniform type of contribution would not only not be imposed but not even be expected. This was achieved by establishing a system of modular co-operation with each library selecting the modules in which it was interested. In this way, the participants were able to work together in their best interests, undertaking a communal responsibility where strong, and being supported where weak. Harris attributes the failure of some co-operative schemes to the misconception that libraries possess a high degree of sameness, and therefore they have failed to appreciate the potential of different libraries: "Concept of areas of excellence in different libraries leads naturally to the development of information services married to excellence." (Harris, 1973:147). As with the Ontario Universities Library Co-operative System (OULCS), the Newcastle Libraries Joint Working Party agreed at the outset that each library had duties it had to fulfil itself, as co-operation is intended to enrich and extend services, not to replace or bolster them. Attention is currently being paid to staff involvement to help form attributes favourable to co-operation, even to the extent of interchanges of staff. The Working Party meets each term and

spawns specialist groups, allowing maximum development with the minimum of interference.

With regard to stock, their "aim is planned selectivity" (Harris, 1973:148) and Harris mentions comprehensiveness was never seriously considered as it is too wasteful of resources, swamps active stock in so far as relevant material tends to get obscured by a mass of the non-pertinent. Thus the intention is to develop a good local periodical and book coverage within each library's areas of excellence, backed up, as they are, by strong national collections, such as that at Boston Spa. Coupled with stock acquisition, is stock relegation, and co-operative storage facilities have been provided by City Library and the University.

Because of the adoption of the concept of areas of excellence, it makes joint cataloguing and a record of joint holdings of dubious worth as most enquiries are channelled automatically to particular libraries. Other areas of co-operation include the rationalisation of periodicals, audio-visual materials, binding and reprography. As Harris says: "We seek to tailor co-operation to real needs capable of practical attainment, and based on retaining individuality." (Harris, 1973:149). Jefferson sums up the Newcastle co-operative scheme as a "ferment of co-operative projects founded on the realism of local circumstances and characterised by pragmatism rather than neat theoretical abstractions." (Jefferson, 1977: 123).

5.2. SELECTED EXAMPLES FROM NORTH AMERICA

Moving across to North America, mention has already been made of OULCS in Canada which started in 1973.

5.2.1. OULCS

Each university's commitment to participate presupposes self-sufficiency at undergraduate level, interdependence in the provision of services for research and graduate use and where appropriate, co-ordinated and centralised technical processing, centralised storage and the introduction of automation.

5.2.2. TRIUL

Another Canadian example is found in TRIUL, initially the Tri-University Libraries of Simon Fraser, British Columbia and Victoria, which operate on a volunteer basis. Just as at Newcastle where staff attitudes are regarded as crucial and a decisive factor in the success or failure of any co-operative scheme, so too TRIUL consider their most significant accomplishment to be in the area of communication and the annual meetings which are held so that the librarians from the participating institutions can become acquainted, exchange information on job problems and even if nothing more concrete is achieved, it is felt, reports Lawrence Thomas, that this is sufficient justification of the cost. Other areas of co-operation have been in the purchase of a microfiche duplicator and the emergence of a standing committee concerned with orientation and library instruction. By broadening its base to include some of the major public and government libraries, it has become a more persuasive voice in the political arena than would have been possible if each library acted independently. The participating libraries have also decided on a computer-based catalogue support system, viz. the University of Toronto Library Automated System; on a new interlibrary loans experiment aimed at improving access to collections and they have established an Education Library Advisory Committee to liaise with the provincial government. However, as Thomas points out, a fundamental weakness of TRIUL has been its inability to establish conditions for simply getting a job done. (Thomas, 1978:27-33).

5.2.3. THE FARMINGTON PLAN

In the U.S.A., the Farmington Plan was the result of a proposal for a division of responsibility in the acquisition and recording of library materials, reports Metcalf. (Metcalf, 1948:296-308).

It went into effect for Sweden, Switzerland and France at the beginning of 1948 with fifty two libraries participating. The plan proposed that at least one copy of every book and pamphlet published anywhere in the world following the effective date of the agreement, that might reasonably be expected to be of interest or

potentially so, to a research worker in the United States, should be purchased and housed in one of the libraries of the participating institutions. It was also proposed that such items should be immediately catalogued and cards sent to the Union Catalogue at the Library of Congress.

The comprehensiveness of the proposals and their subsequent extension to other countries in Western Europe was an attempt to make good the deficiencies in European books in American libraries. According to Edwin Williams, a survey of sixty major libraries revealed that less than one fifth of all books published in Italy and Belgium in 1945, one third of the Swedish output, two fifths of the Spanish and little more than a half of the French were to be found in United States libraries. (Williams, 1945:313-23). After World War II, the government authorities agreed that a co-operative mission under the sponsorship of the Library of Congress should acquire European books published since 1940 in Nazi-dominated countries. A committee was formed and they broke up the field of knowledge into about two hundred and fifty subject fields and assigned priorities to the libraries that wished to participate. As a result, the Library of Congress Mission for Co-operative Acquisitions brought over half a million volumes into the U.S.A., and distributed them to the libraries by subject.

The two major criticisms of the Farmington Plan according to Metcalf, involved the scope and complexity of such a co-operative scheme. These factors militated against its successful implementation. The scale of acquisitions was also regarded as a fundamental defect as it "ignores the fact that selection is fundamental in the philosophy of librarianship." (Metcalf, 1948:303). The Farmington Plan was terminated at the end of 1972.

5.2.4. C.R.L.

A very successful co-operative scheme in the United States is the Center for Research Libraries (C.R.L.) in Chicago founded in 1949. Having begun as a regional centre, serving the mid-west, it has developed not only into a national but in some fields, notably foreign newspapers, an international centre. Gordon

Williams identifies the two basic functions of the C.R.L. The one is to act as a centralised co-operative storage library for "infrequently used older and infrequently used materials deposited by the member libraries." (Williams, 1973:15). The second function involves the C.R.L. in acquiring "those materials whether old or new, that were not adequately available to the member libraries and house these centrally and make them available." (Williams, 1973:16). These materials include, inter alia, foreign doctoral dissertations, United States State documents, foreign government documents, foreign newspapers, retrospective collections as well as subscriptions to infrequently used periodicals. (Williams, 1973:13-22).

The C.R.L.'s effectiveness is measured not only against the relatively modest amount of material that its members borrow, but also by the savings they make by being able to forego not only the purchase, but also the processing, shelving and future storage of those materials. Williams estimates the C.R.L.'s storage per volume to be 0,3c. compared to 0,13½c. per volume per year in a working library. (Williams, 1973:15).

The C.R.L. is somewhat unique in the U.S.A. because the more traditional approach to resource sharing and interlibrary loans has been theoretically oriented in a hierarchical system extending from locality to state and region, with a handful of the largest research libraries at the apex serving as the collections of last resort. In practice, however, borrowing libraries have tended to by-pass the system and direct their requests immediately to the larger libraries.

5.3. THE BRITISH VERSUS THE AMERICAN SYSTEM

In commenting upon methods of co-operation, de Gennaro notes that the findings of recent interlibrary loan studies suggest that the vast majority of requests can be more easily satisfied from a centralised and specialised facility such as the BLLD, whose sole function is to serve this need, rather than the United States idea where they are for the most part committed to the apparently logical idea that an effective national resource sharing system must take maximum advantage of, and be firmly based on, the existing research libraries, and that it requires the prior development of a complex computer-based telecommunications network to make it function.

Paradoxically, it is, in de Gennaro's opinion, American insistence on these points that has most inhibited the development of an effective resource sharing system, whilst the British constructed a parallel structure without complex technology and succeeded to a point where they are currently serving not only their national but also an international market. (de Gennaro, 1975:917-23). In fact, in 1974, over two thousand organisations in over one hundred countries used the BLLD's overseas photocopy and loan services, and 160 000 photocopy requests and 15 000 loan requests were received. (Jefferson, 1977:150).

One of the advantages of a national library resource centre, such as the BLLD, stems from the savings to libraries of periodical subscriptions, of which the BLLD receive over 44 000. It also has an annual monograph acquisition rate in excess of 60 000 volumes and is thus able to satisfy about 85% of its periodical requests with photocopies and 83% of all requests from stock. It has also been estimated that it is handling about three quarters of all interlibrary loan requests within the United Kingdom, thus relieving the pressure on the major university libraries. (de Gennaro, 1975: 917-23). In fact, the BLLD provides an efficient and immediate way to increase the total resources available to all libraries and is an indispensable element in the British library network system.

5.4. HISTORICAL EVOLUTION IN SOUTH AFRICA

Turning now to South Africa, although interlibrary loans were operational in a small way, the visit by Pitt and Ferguson which preceded the 1928 Library Conference and the formation of the South African Library Association (SALA) in 1930, added tremendous impetus to co-operative activities.

S.I. Malan has outlined seven principles of co-operation as including:

- (a) Voluntary nature of the service.
- (b) "Unity in provision of documents and information", and elaborating on this point, Professor Malan writes that the "inseparability of document and information implies that in co-operation between library and information services each must have its rightful place." (Malan, 1978:82).

- (c) Unselfishness, as all library and information services except for those in the private sector, are government subsidised and therefore nationally owned which presupposes that their services and stock should be used in the national interest.
- (d) Speed of service, which has contributed to the success of the BLLD.
- (e) Economy of service.
- (f) Continuity of service.
- (g) Co-ordination of service. (Malan, 1978:81-107).

Malan groups the areas of co-operation under the three headings of bookstock, services and personnel.

5.4.1. BOOKSTOCK

With regard to book stock, he sub-divides it into the three aspects of selection, acquisition and storage.

Selection offers itself as a prime target for co-operation because the volume of published material, lack of time, manpower and financial restraints make it impossible for any one library to acquire all necessary items. As an example, even UNISA which currently has a library materials budget far exceeding that of any other South African university, accessioned only fifty seven and a half thousand volumes in 1978¹ yet the British market alone produced sixteen thousand and fifty three books of academic interest in the same year. (Cooper, 1978:6). Harvard University, which in 1977 - 1978 had a library materials budget of \$3,5 million, the highest among the United States research libraries attached to universities, added two hundred and fifty five thousand and eighty five volumes and subscribed to ninety five thousand periodical titles, and still did not achieve a 100% coverage of materials of potential scholarly interest. Thus a co-operative scheme, particularly in South Africa which has neither a BLLD nor a C.R.L. within its boundaries, would go a long way to ensuring that the broadest and deepest possible coverage be obtained.

¹ Response received to Question 8.1. of Questionnaire. See Appendix 6.

Acquisitions can be differentiated into basic bookstock, minimum active stock and specialised subject stock. R.F. Kennedy was invited by a special Action Committee of the SALA to undertake a pilot investigation into the then existing state of the library bookstock in South Africa to ascertain strengths and weaknesses. This investigation was aimed at improving co-ordination of bookstocks and forging closer co-operative ties among South African libraries. It had been decided that for the purposes of co-operation the country should be divided into six regions, viz., the Transvaal, the Free State, Natal, the Eastern, the South-Western and the Northern Cape, and that in each of these regions there should be established, on the basis of existing collections, at the minimum one working collection for each of the main types of libraries, i.e. university, public and special. (Kennedy, 1961).

Kennedy's report complemented one compiled by H.C. van Rooy in 1960 which was presented to the SALA Annual Conference held that year in Bloemfontein, in so far as his was primarily concerned with the quantitative aspect as opposed to Kennedy's, which concentrated on the qualitative. Kennedy found however, that the librarians "did not want to be told in what subjects they should specialise" (Kennedy, 1961:38) and they did not want anything imposed on them. He also concluded that local co-operation was more important than national and must precede any national scheme.

Kennedy's investigation was not directed at the basic domestic bookstock of South African libraries as this is obviously geared to the needs of the institution's own users and is not normally included in any co-operative scheme because of internal demand.

These studies were a useful foundation on which to base the Programme for Future Development. This was approved by a National Conference of Library Authorities late in 1962 and intended to provide the guidelines for future library development in this country.

The minimum active stock covers material which a library's users may need, and it is the premise of the National Library Advisory Council (NLAC) (established in 1967 as part of the

implementation of the Programme), that such collections ought to be built up co-operatively on a regional basis, with each region furnishing a definitive delimitation of its needs.

Specialised subject stock is obviously associated with the research institutions and according to the NLAC only long term research projects should be considered, and because such material is very expensive and seldom used outside the research field, acquisition should be organised on a national scale.

For this very reason, the NLAC are engaged in investigating the national holdings in a number of disciplines. Their attention at this stage is being directed primarily to periodicals and their findings are being published in their Report Series. Nineteen disciplines have been covered to date, including Education and Mathematical sciences (both inclusive of books and journals), Library Science, Political Science, Criminology, Social Work, Accounting, etc. The information given is in tabulated form, giving not only the locations of each title, sub-divided by areas, but also an evaluation (represented by a percentage) of the title by a number of researchers. (NLAC, 1974).

The final aspect of bookstock relates to storage. Here in South Africa, according to Malan,

"the need for storage facilities began to make itself felt in the middle seventies. However, except for State Library, which is prepared to receive redundant and little-used material and also to act as a national exchange centre, little is being done, planned or envisaged and it will probably be some time before anything is done, mainly because of the relatively small stocks of the existing institutions." (Malan, 1978:93).

Mention was made of the C.R.L. providing co-operative storage facilities as one of its two major functions. In fact, in a previous article, Malan considered it would be around the year 2000 before South African libraries would be in need of such a facility, because "it would seem that a policy of decentralization of the national bookstock will have to be accepted in favour of a policy of centralization regarding currently as well as seldom used materials." (Malan, 1973:51-52).

5.4.2. SERVICES

The aspect of services can also be sub-divided into co-operative retrieval services such as joint catalogues of which UNICAT (Union Catalogue of Monographs) is one example and PISAL (Periodicals in South African Libraries) is another, both of which have been computerised; and bibliographical and information services, which have developed out of attempts to establish co-operatively organised loan services.

Bibliographical services include the current South African National Bibliography (SANB), compiled by the State Library since 1959 and SAMARC (South African Machine Readable Cataloguing). N.M. Lodder and D.W. Fokker refer to the appointment of a Committee on Bibliographical Services (which subsequently merged with the Committee on Information Retrieval to become the Committee for the Development of Bibliographic and Information Techniques and Services), by the NLAC in 1971 to investigate various aspects of mechanisation. These included the possible application of MARC records from the MARC data bases; the viability of establishing a MARC processing centre entrusted with the distribution of MARC services on a national basis, including the form such services should take and finally estimating the cost of establishing such a centre. (Lodder, 1973:206-213).

It was decided to carry out the study in two stages. The first was to determine, without actually using MARC tapes, whether their potential usefulness to South African libraries was sufficient to justify their experimental application and what the cost of such an experiment would be. The second phase would be the utilisation of MARC records for a limited period of time if the findings to stage one warranted it.

In view of the results received to questionnaires, the Working Group concluded that the cataloguing procedures were sufficiently standardised and therefore the information supplied from MARC would basically be acceptable.

The questionnaire also revealed the fact that twenty four libraries preferred a centralised service which could provide individual libraries with selected cataloguing information while

six were opposed to the idea of centralisation. The vast majority however opted for a card service as opposed to magnetic tape.

The second part of the survey aimed at determining the proportion of book acquisitions which were likely to be covered by MARC, both from existing and planned MARC tape services; to which of the MARC services a centre should subscribe; and to what extent back issues of MARC would be required. Using the acquisitions of six libraries in the Johannesburg/Pretoria area which were representative of the libraries likely to subscribe to MARC, it was found that 84,6% of the monographs processed were in English, of which 75,8% were published either in Britain or the United States. This led to the conclusion that the MARC services provided by the BNB and the Library of Congress would provide a high measure of coverage. An analysis of publication dates revealed that 71,0% of the orders had been published in 1970 or later, while 83,2% in 1968 or later, thus demonstrating that no more than five years of back issues would be required.

The authors conclude their article by exhorting:

"that many larger libraries are already, or will shortly be, designing and implementing computerised procedures, and that there is therefore an urgent need for co-ordination and co-operation amongst libraries in order to avoid unnecessary duplication and expenditure. In this connection the MARC study takes on an added urgency as it is felt that the MARC services can be used economically in this country only on a co-ordinated, centralised basis because of the relatively small growth rates of the monograph collections of South African libraries." (Lodder, 1973:211).

Since then, SAMARC has been developed as the proposed national exchange format for use within South Africa and in July 1979 a senior librarian and a senior computer specialist were appointed to investigate the feasibility of developing a national co-operative computerised cataloguing network.. These two people are directly responsible to the CSIR, which in turn will be advised by the NLAC's Computerised Cataloguing Network Committee.

John Willemse, addressing the Conference on trends in information

handling and library computerisation which was held at the CSIR in April, 1978, considers that a national MARC data base inclusive of a joint catalogue representing the holdings of all participants and indicating terms of availability, supported by a fast delivery service would open the way to an optimum national library system. He attributes the failure of traditional library co-operation to two fundamental weaknesses. These include the "lack of formal commitment to minimum controllable and enforceable performance standards" and the "lack of an adequate bibliographical communication between libraries - including the means of locating a publication in another library in the country as easily as in one's own, and obtaining it quickly when needed." (Willemse, 1979:132).

Fokker recommends that the stage is now set for each library to "determine for itself which services it will wish to receive, what demands it is going to make and what it is willing to contribute in terms of raw material and finance [to a national computerised library network]." (Fokker, 1979:123).

Another development in South Africa is the introduction of MEDLINE by the National Medical Research Council of this country by which computerised medical bibliographical data from the National Library of Medicine in the United States can be requested on the payment of a fee.

Another co-operative retrieval service is operated by the CSIR through its South African Selective Dissemination of Information (SASDI) service, which keeps researchers regularly and automatically abreast of bibliographical information in their subject areas, also in return for a fee. SASDI is also able to provide retrospective information. The Human Sciences Research Council (HSRC) is engaged in developing comparable services in their field.

Another side to services of potential value to South Africa identified by Malan is loan services, which can be differentiated into national lending facilities and reciprocal lending ones. In the case of the former, the State Library in Pretoria assumed responsibility for interlibrary loans in the 1930's, and unofficially the CSIR offers a similar service for the natural sciences and technology.

The tendency here however is to encourage the growth and development of inter-library loan departments with each library rather than channelling everything other than overseas requests through the central organisation.

The Copyright Act, 1916, revised in 1965, incorporated provisions relating to legal deposit. In this way, the State Library in Pretoria and the South African Library in Cape Town (in addition to three other depository libraries) each receive a copy of every item published in the country. This ensures the preservation of local material. However, it permits the copy sent to the State Library to be available for loan whilst the copy sent to the South African Library is for preservation. The new Copyright Act of 1979 excludes regulations pertaining to legal deposit.

Reciprocal lending facilities should include not only the ability of an institution to borrow material directly or indirectly from another, but for users attached to one institution to use, and even borrow material directly from another. This is in fact happening on an ad hoc basis in the university arena where a student, on the production of his registration card, is given loan privileges.

5.4.3. PERSONNEL

The final area of co-operation identified by Malan relates to personnel, and this includes the training of future librarians and information workers. At present, only the Universities of the Witwatersrand and of Port Elizabeth offer no professional training, but where library school facilities exist, the curriculum should be of such a standard that it fulfils the requirements stipulated by SALA for recognition by them. Co-operation between the training institutions and the organised profession, essential in the compilation, implementation and maintenance of such standards, and in their revision in the light of new advances, is a feature of the South African scene. In fact, as from 1980, new standards are to be introduced replacing the current ones which were formulated in 1964 and have now become obsolete.

Professional associations, such as SALA, whose constitution is currently under review, provide a venue for co-operation among its members and it was in fact SALA that organised the historic

1962 Conference of Library Authorities which was responsible for the blue print of library co-operation in the country. There is also the NLAC, formed in 1967, which advises the Minister of National Education on library matters, though there are attempts being made at the present time to convert it in to a national council with executive authority. As such, it would stimulate, initiate and co-ordinate library services on a national basis, with particular reference to the planning of networks for national library and information services by which co-operation on a national, though voluntary, basis could be achieved.

CHAPTER 6

ALLOCATION OF FUNDS : PRINCIPLES AND PRACTICES

Most of the literature presupposes the allocation of funds to teaching units and concerns itself with the various ways of performing this task.

6.1. NON-ALLOCATION VERSUS ALLOCATION

There are however, a couple of dissenters whose views must be expressed.

Harry Bach advances five main reasons for not allocating the library materials budget. Firstly, non-allocation keeps the selection of library materials under the control of the library, and Bach is emphatic that this is where it rightfully belongs. Allocation, on the other hand, implies the abdication of this responsibility by the library to the teaching staff. Secondly, under a policy of non-allocation, the academics would be encouraged to an even greater extent to participate in systematic book selection. The motivating factor advanced by Bach is that members of staff who were genuinely interested in building up a good library would no longer feel encumbered by an arbitrarily determined quota. Thirdly, allocation might be considered as providing a safeguard against unreasonable demands by certain staff members and protecting the librarian against possible charges that expenditure of book funds has been unjust to some departments. However, Bach counters this argument by saying that it is obvious that an acrimonious and unwholesome spirit prevails at such an institution, and a change from non-allocation to allocation is unlikely to alter such a situation. Fourthly, allocation implies rigidity, and as there does not appear to be a sound basis for devising a perfect formula, some departments continue to feel maltreated. Non-allocation, on the other hand, is far more flexible and if departments present legitimate complaints, the librarian is in a position to make immediate adjustments rather than having to wait till the beginning of the following financial year. His fifth contention is that allocation takes a great deal

of time to prepare and as contributory factors alter, the formula has to be constantly revised. Alternatively, the formula remains static despite changing circumstances, such as the introduction of new courses. Bach feels that allocation may consequently lead to a waste of money as some departments may receive less than they need while others may have too much. Although it is very difficult to reduce a department's allocation, any increase will either have to depend on additional money being made available, or be made at the expense of another or others. His final point relates to the excessive amount of red tape and bookkeeping that is involved in maintaining departmental funds. (Bach, 1964:161-5).

Conversely, he considers the following reasons reinforce his contention that funds should not be allocated:

- (a) The very act of allocation removes the onus of book selection from the library. It has already been established that the consensus of opinion places the responsibility for book selection and collection building firmly in the hands of the library but does not exclude academic participation. Danton had in fact made the same assertion a year earlier. He wrote: "Allocation tends to remove the responsibility for book selection from the library, where it administratively, philosophically and usually legally belongs, and places it on the faculty, who cannot be held responsible or accountable." (Danton, 1963:69).
- (b) Librarians are more, rather than less, likely than the teaching staff to develop a superior book collection because of the availability within the library itself, of a large variety of book selection aids. Librarians can also be expected to be more responsible, reliable, systematic and impartial, buying essential titles outside their own interests and in areas not covered by the teaching departments. In other words, librarians tend to have a global rather than an insular approach to selection. Their intimate knowledge of the bookstock, the reference queries they handle and the known interests of both staff and students equip them to ensure the development of a balanced and meaningful collection. However, he concedes that staff participation in selection is of inestimable value.
- (c) The flexibility inherent in non-allocation enables the library to meet unexpected library and depart-

mental needs promptly. It also permits long-term planning. It enables the library to take advantage of favourable opportunities in the book market and to adjust to changes in publishing trends. It also prevents hoarding of funds by departments which could be utilised better elsewhere or alternatively, injudicious buying, if unspent quotas are forfeited.

Bach's article evoked a response from Hanes, who challenges both his assertions and the reasoning behind them. He refutes the premise that the librarian who favours academic staff responsibility for book selection must, by implication, favour allocation and vice versa, on the basis that allocation or non-allocation should not represent "the sine qua non of the academic librarian's philosophy in regard to collection building." (Hanes, 1964:409). He continues:

"to assume that blind adherence to a single administrative pattern will produce a uniform, high-quality result is nonsense. It is to assume that regardless of varying conditions, librarians can take refuge in a formula; and it is a denial of the obvious fact that great libraries have been built under both systems." (Hanes, 1964:409).

With regard to actual selection, Hanes does not see a situation in which librarians and academics are engaged in internecine warfare, with each sector endeavouring to vaunt their superior capacities, but rather an involvement in a common effort so as to achieve a common goal which is the implementation of the educational purposes of the university by the most effective and efficient means. Thus, he advocates, the utilisation of "every resource at our command, and certainly we cannot afford to ignore the superb reservoirs of knowledge and skill represented by the highly trained specialists of the college and university faculty." (Hanes, 1964:409).

In countering Bach's argument relating to allocation implying rigidity, Hanes suggests the allocation to the departments of a portion of the library materials budget. The balance would remain under the control of the library for developmental purposes, general interest material, multi- and extra-disciplinary works, expensive purchases and additional financial support for the departments, if justifiable.

Bach's suggestion that allocation may lead to departmental hoarding of resources, is also challenged by Hanes. He suggests setting a series of deadlines by which times, specified amounts or percentages of the departmental allocations must be encumbered or they revert to the library. This, he considers, will have three benefits. It will encourage an assessment of collections and the development of desiderata lists by the departments. It will also spread the workload of the Acquisitions Department equitably throughout the year. Finally, it will provide a vehicle for the reduction of departmental funds with a minimum of acrimony.

Bach was undaunted by Hanes' criticism. In his reply, Bach accused Hanes of missing the point of his earlier article. The gist, he claimed, had not been so much the question of allocation per se, but by not allocating, one of the major roles of the librarian, viz., that of book selector, aided and advised by members of the teaching staff, would be more easily achieved than by allocating, which would give the initiative to the academics. He goes on to say that just as book selection is one of the librarian's main responsibilities, so too is the formulation and implementation of an acquisition policy, the evaluation of collections and any remedial action that may be deemed necessary. (Bach, 1964a: 411-2).

Another critic of allocation is Orr. He writes:

"It seems to me that the sooner such cumbersome and sometimes troublesome methods of administering library funds [departmental allocations] are eliminated in favour of centrally administered library funds the better off all concerned will be. Moreover, in my opinion, there is a greater likelihood then of achieving a more balanced development of the book collection as a whole where funds are centrally administered." (Orr, 1963:74).

A third opponent of allocation is Summers, who contributed to the debate a decade later. He considers that the use of a formula tends to perpetuate current differences and inequities, and that current conditions need not necessarily be a guide to conditions that ought to exist.

"There are serious questions about the viability and utility, from the library's point of view, of the use of a formula for the allocation of

resources, particularly in the light of the conditions affecting the society and higher education to-day. Most, if not all, formulae were formulated with the expectation of allocating the financial proceeds of growth among competing demands, and therefore are questionable instruments for dealing with long periods of limited or no growth." (Summers, 1975:639).

The proponents of allocation are legion and differ only on the questions of variables that warrant inclusion in a formula or establishing guidelines or on the technique to be employed.

6.2. GUIDELINES FOR ALLOCATION

A distinction must be made between the words 'formula' and 'guidelines'. Formula has two connotations. Firstly, used in conjunction with the word 'budgeting', it is a method of allocation which may require the addition of a certain number of volumes per student and/or staff, or the inclusion of a number of variables in a formula, such as title range, average price of library materials, student enrollment, etc. Any such recommendation tends, by virtue of the system employed in distributing the money, to be known as a formula. However, the definition of formula in the Concise Oxford Dictionary states: "Fixed form of words as definition or enunciation of principle ... principle serving to reconcile difference of aim or opinion." (Concise, 1976:415), and the implication is rigidity. It is this rigidity of application which distinguishes a formula from guidelines which as the word connotes, merely offers suggestions which may or may not be implemented. In the literature however, the word formula is not used etymologically, but as a way of describing the method of allocation. Rigidity is not an ingredient as can be seen in the following random examples:

Although variables or percentages may be recommended, it is with reference to that portion of the library materials budget which the librarian decides to allocate to the teaching units, and does not apply to the total library materials budget. Thus flexibility is retained as at UCLA. (A.R.L., 1977:[73-77]). In addition, a number of the proponents of the use of formulae,

continually review their allocation, e.g. Colorado State University. (A.R.L., 1977:[20-29]). SPEC consider the inclusion of a monitoring device, which could be circulation statistics, for example, to be essential for any formula that might be adopted. This will enable the allocation to remain both equitable and effective. (A.R.L., 1977:6-7). It also implies an annual revision of the distribution in the light of changing circumstances.

SPEC have compiled a kit on the question of allocation in academic libraries. In providing their suggestions, they make the following assumptions:

- (a) The allocation process should be opened up and assumptions should be verbalised.
- (b) Available funds should be distributed in a planned and logical way, based on the library's goals and priorities.
- (c) The library should monitor the expenditure of funds.
- (d) The library should be able to demonstrate how the funds are being allocated and spent.
- (e) Allocation should provide a method for fulfilling collection goals and needs.

The following principles underlined their recommendations:

- (a) Any method used should provide for an equitable distribution of available funds according to agreed upon priorities.
- (b) Control should be within the library, with appropriate consultation within and outside the library.
- (c) The allocation method should be developed in conjunction with, or in close relationship to, collection development policy statements.
- (d) The method of allocation should be readily understandable to those responsible for making the distribution; to those responsible for spending the money, viz., the book selectors; and finally, to those who must interpret the results to the library users.

- (e) The allocation method must incorporate flexibility so changing circumstances, be they in the institution or in the book market, can be met.
- (f) The allocation process should not only cater for current needs but also anticipated ones, which provision would also assist in planning future developments.
- (g) The process used should be sufficiently objective so that it is not suspect to political pressure.

Various problem areas were identified. These included:

- (a) Determining in advance the cost of standing orders and blanket orders.
- (b) The rigidity that follows if there are separate budgets for different types of library materials, e.g. monographs and periodicals.
- (c) The need for a discretionary or reserve fund to take advantage of opportunities that might arise, e.g. special offers on expensive items; or help to departments who can justify the need for additional ad hoc funds; new courses; or retrospective material, etc.
- (d) Inflation and how it differs between subjects and types of material.
- (e) Rigidity if funds cannot be transferred from one account to another.
- (f) Special funds which may have limitations on their use. The Center consider that such bequests should be taken into consideration when library funds are allocated.

Having clarified the assumptions, principles and problem areas, it is necessary to identify the factors that comprise the guidelines.

There are in fact, according to the Center, both objective and subjective factors.

The objective factors can be further sub-divided into:

- (a) External; and (b) Internal.
- (a) External:
 - (i) Rate and pattern of publishing in the various subject fields.

- (ii) Costs of books and other library materials.
- (iii) Differences in costs between various categories of materials.
- (iv) Inflation.
- (b) Internal:
 - (i) Size of the collection.
 - (ii) Rate of growth, by department and/or subject.
 - (iii) Use of the collection.
 - (iv) Unfilled user needs.
 - (v) Interlibrary loans borrowing and lending statistics.
 - (vi) Size and kind of user group, e.g. staff; post-graduate and undergraduate sizes and courses.

The subjective factors encompass:

- (i) Mission and goals of the institution.
- (ii) Campus politics.
- (iii) Historical development of the collection.
- (iv) Academic distinction of departments.
- (v) Extent of reliance of academic departments on library materials. (A.R.L., 1977:2-8).

The variables involved in allocation are not always so comprehensive, and in fact, McAnally identifies three basic approaches with some important variations that were in vogue prior to the mid-1960's. (McAnally, 1963:159-71).

6.3. EVOLUTION OF ALLOCATION

The most straight-forward approach was the application of an arbitrary percentage of the parent institution's total budget, usually in the vicinity of about 5%. This however, gave no lead or suggestion as to the determination of the distribution amongst the academic units. A variation on this was the application of a fixed percentage growth rate to the size of the collection, also

in the vicinity of 4 - 5%. A unit price was then applied to the number of volumes to be added. This system could not however be universally adopted as it failed to distinguish between the new and rapidly growing institutions with a high growth rate and the older and more stable ones whose growth rate was more modest. Herbert White however points out that even a mere net growth of 2% per year "would lead the academic library to a materials budget increase of 15 to 18 percent per year, just to maintain equivalence, and without any attempt to respond to new educational programs on the campus ..." in the current financial climate. (White, 1979:20).

A second major type of budgeting was the application of a set monetary amount per student which would then enable one to arrive at a gross library sum. In commenting upon this point, Burton says: "A commonly used figure ten years ago [i.e. 1965] was \$30. Today [i.e. 1975] it would probably have to be in the range of \$100 to \$150." (Burton, 1975:62). The final method employed cost analysis in the budgetary process. This involves ascertaining the actual cost in time of all library operations, such as reference work and circulation control, and establishing a book budget so that the units to be processed can be calculated. Although cost analysis produces a very detailed and useful budgetary statement, it is very complicated and expensive to administer.

6.4. METHODS OF ALLOCATION

6.4.1. COST ANALYSIS

Keller advocates the use of programme budgeting in conjunction with cost benefit analysis. He feels the former technique can be used advantageously for the acquisition of funds and the latter for its subsequent distribution. It can, he says, "help to produce a higher proportion of better decisions in resource allocation than can traditional methods of budgeting." (Keller, 1969:159). He goes on to point out that "the real price of inefficient allocation ... is not the misspent dollar, but the

foregone benefits that were lost with it." (Keller, 1969:157).

A tool used in cost benefit analysis is linear programming and Goyal considers this technique to be the one best equipped to produce optimum allocation of funds. He suggests that a form should be designed which is sent to each department for completion and which can be used by them to support their application for funds. The form would be divided into three categories:

- (a) Books and journals that the department require to function effectively;
- (b) Books and journals that the department consider to be desirable, but which are not essential;
- (c) Books and journals that the department would like if funds were available. (Goyal, 1973:219-22).

This exercise appears certain to contribute towards the departments planning their purchases and evaluating their holdings on a regular basis, which would be of great advantage. The assessment of needs however, would obviously be subjective, which is a weakness. Goyal also recommends that the importance of a department should be taken into account, e.g. the social importance of the subject taught; the degree of interdepartmental support and the importance which the university attaches to the work of the department. Departmental importance is also unquantifiable by objective means. This could lead to difficulties in organising ratios of pre-eminence that would be generally acceptable, although Goyal suggests the size of the department as constituting a yardstick. This Kohut and Walker feel, allows the librarians to avoid independent value judgements between incomparabilities, for instance, whether physics is more important than philosophy. (Kohut, 1975:404). However, student size need not necessarily be a valid indicator of a department's contribution to society and to the university. Enrollment could well be motivated in a number of instances by virtue of that department's courses being 'a soft option'. In addition, Goyal also includes as a separate entity, student and staff numbers.

6.4.2. FORMULA BUDGETING

One of the simplest examples of formula budgeting as a method of allocation is found in the quantitative technique. Notable

exponents of this method are Clapp and Jordan. Ironically however, the authors had not intended their proposal to be used as a budgetary device, but as an approximation for estimating the size "required for minimum adequacy by the library collections of a number of academic institutions of widely differing characteristics." (Clapp, 1965:373). However their quantitative criteria, which included the concept of weighting, enabled formula budgeting to make very definite inroads into the more traditional budgeting systems then generally in use. (Clapp, 1965:371-80).

A combination of cost analysis and formula budgeting inclusive of weighting derived from the Clapp-Jordan formula was used at the University of Michigan. The budget, says Burton, was divided into five components. These comprised the library materials budget; the public service points budget; the technical services (acquisitions, cataloguing and classification and processing) budget; the administrative services budget and one for current expenses which covered telephones, stationery, equipment, etc.

As it is the library materials budget that is of primary concern, this is the only component that will be dealt with. Working on circulation data and from observation, it was concluded that first- and second-year students were regarded as a single unit each. Third- and fourth-years counted as two units; post-graduates as four and academics as six units each. Acquisitions were taken to be, for a given academic department, the product of the number of weighted users in that department plus the average number of monographs and periodicals, considered separately, necessary to furnish a research level collection.

Thus the library materials budget for any unit became the sum of the product of the average cost of a monograph in the specific subject area and the product of the number of weighted users together with the average number of monographs per user to be acquired. The same criteria were used to plan the periodical acquisition budget, substituting of course the average price of journals as opposed to monographs in the subject area. (Burton, 1975:61-67).

McAnally describes the formula used at the California State Colleges which also included the number of volumes per undergraduate to be added allied to the concept of weighting. The Colleges' book

budget was based on the premise that the desirable total size of a book collection was 60 volumes per student for the first 1000 F.T.E. students, 30 volumes for the next 4 000, and 20 volumes for all over 5 000. Their current acquisition rate was based on 4 volumes per student for the first 1 000 F.T.E. students, 2 volumes for the next 4 000, and 1 volume for all beyond 5 000. In addition to the book fund, 65% of the budget was allocated to operating expenses, which included 35% for periodicals and 30% for binding. The major criticism levelled at the Californian model by their own librarians was the omission of graduate students and the method of weighting employed. Their recommendation was 5 units per graduate, and 4, 3 and 2 instead of the 4, 2 and 1 used for the undergraduate population. (McAnally, 1963:159-71).

The quantitative approach suggested by Clapp and Jordan and used at California State Colleges had been popularised by the American College and Research Libraries, which had advocated a standard 50 000 volumes for up to 600 undergraduate students and 10 000 additional volumes for every additional 200 undergraduate students. (A.L.A., 1959:274:80).

Massman and Patterson criticise the rationale behind such an approach, as "academic library's holdings can be determined only by the quantity and range of the materials being published which are relevant to the academic programs it is supporting, not by the traditional number of students criterion." (Massman, 1970:84). Thus course for course, there is no difference in the number of titles needed by any institution, irrespective of its size, and the two variables they consider should be taken into account are title range and the courses run by the institution. (Massman, 1970:83-88).

William McGrath has written several articles specifically on the question of allocation and methods to be employed. In his first, he suggests the use of two variables. These are the number and the average cost of books published each year in the United States which have immediate relevance to each of the academic departments within the university. (McGrath, 1967: 269-72).

Kohut and Walker criticise this formula on the basis that

inherent in the literature size factor is the assumption that the potential utility of a given subject literature is proportional to the size of the literature of that field, i.e. the relevant title range, regardless of the subject area. (Kohut, 1975:403-10).

McGrath's second contribution came two years later. He and his co-authors eulogise on the merits of a good formula as helping to "guarantee that available book funds will be distributed efficiently and equitably, that departments will be properly funded and that the book collection will approximately reflect the curriculum." (McGrath, 1969:52). They also state that "ideally, a simple mathematical formula with as few variables as possible would be most desirable." (McGrath, 1969:51). Thus, having listed forty-three variables which should be taken into account, they reduce them to three. The initial list included, inter alia:

- (a) Total number of books published within subject areas.
- (b) Total cost of books published within subject areas.
- (c) Existing collection, measured according to shelf-list.
- (d) Average price of books published within subject areas.
- (e) Relative strength of book collection.
- (f) Previous year's departmental allocation.
- (g) Number of books purchased in previous year per department.
- (h) Number of staff members and their length of service, as a long established department should have satisfied its basic needs.
- (i) Courses offered and their level, viz., undergraduate or post-graduate.
- (j) Student enrollment at both undergraduate and post-graduate levels.
- (k) Circulation statistics.
- (l) Citations in theses.

(m) Use of the reserve book area.

By using factor analysis, with the aim of producing a manageable formula, forty variables were eliminated. Their recommended prescription was:

Factor 1:

$$\frac{\text{Number of books taken out for that department}}{\text{Total of all books taken out in all departments}} = \text{fraction of total (1)}$$

plus

Factor 2:

$$\frac{\text{Enrollment in that department}}{\text{Total enrollment in all departments}} = \text{fraction of total (2)}$$

plus

Factor 3:

$$\frac{\text{Citations in theses from each department}}{\text{Total citations in theses from all departments}} = \text{fraction of total (3)}$$

These three factors are taken once again and multiplied by the weight of each of them, and the weights of Factors (1), (2) and (3) should equal 1. The authors point out however that the achievement of an absolute weight is not within the mathematical capability of this technique and therefore it will reflect relative weighting by approximation only.

They also suggest that this formula can be used to establish a minimum amount that each department should receive. This is done by dividing the amount to be shared by the number of departments and then adding the weights of Factors (1), (2) and (3) as above. (McGrath, 1969:51-62).

McGrath's third contribution included an acknowledgement that even by reducing his forty three variables to three, the routine data collection and analysis were unnecessarily complex. The refinement he proposes in this article therefore incorporates variables which require little effort to retrieve. He basically advocates a pragmatic quantitative procedure, as opposed to the implementation of a normative approach, which is based on subjective premises.

The empirical base to his model is the equivalence of circulation and demand. He considers that although circulation statistics only reflect the portion of the demand that the library has been capable of fulfilling and also ignores in-library

use, there is sufficient evidence to prove a correlation between the two, and that unsatisfied demand and in-library use is proportional to satisfied demand and circulation statistics. McGrath is also of the opinion that any degree of inaccuracy is more that offset by the simplicity of acquiring the necessary data. Thus demand should determine what the library should buy, and demand, in turn, is determined by the use of the library.

The only other variable required is the average price of books in each subject category. McGrath has thus reverted to the simplicity of his first model. In lieu of title range he has substituted circulation statistics and he has retained the cost factor. He describes his allocation procedure thus: each course taught by each department is classified according to the classification system operational at the library. This might be Dewey or Library of Congress or one of the others. The subject scope of each department constitutes its profile (Column 1). Column 2 comprises the total annual circulation figures of books within each academic department. Column 3 lists the average price of books within each subject field, either by using a national classified bibliography, or by basing the average on prices actually paid for books ordered by the department in a given period. Column 4 indicates cost use, which is calculated by multiplying the average cost of the books by circulation. Total cost use is the total of Column 4. Percentage cost use (Column 5) can then be determined. To arrive at the allocation figure, Column 6, the percentage cost use for each department is multiplied by the total amount available for the purchase of books. The effect of this type of formula budgeting is that books are added in subject fields in proportion to the number that are used. Those books which circulate, but which do not fall within the academic profiles, provide an empirical basis for a general allocation. (McGrath, 1975:356-69).

Fred Smith's major criticism revolves around the charge that insufficient account has been taken of likely future use on the one hand and deterioration on the other. (Smith, 1977:[14]).

However, McGrath's formula does comply with a criterion laid down by Bonn, viz., that "Every library exists chiefly to serve the needs of its own community of users. It follows, then, that any overall evaluation of a library ought to be based chiefly on how well it does, in fact, serve those needs." (Bonn, 1974: 265).

Welwood emphasises the need for an equitable collection development policy and is of the opinion that the use of a formula enables "library administrators ... to establish a systematic approach to the acquisition of library materials while still involving faculty and departments in collection building." (Welwood, 1977:213). The formula he proposes involves three variables, viz., enrollment, circulation and courses offered, plus a factor allowing for inflation correction. Here again, the elements used are ascertainable-from statistical data and not susceptible to subjective assessment. The reasons underlying the choice of the above variables are because they indicate the majority of the library's users; what they use and why they use it. As they are not however considered to be of comparable importance, values are assigned to each factor. With regard to enrollment, first and second year students are weighted at 15% and the third and fourth years at 25% of the total formula. Circulation comprises 30% and the list of courses offered are also weighted at 30%. Recognition is paid to the fact that inflation rates vary from subject to subject, so the average cost of books for each department is also included in the formula tabulation. The formula involves the following stages:

First and second year enrollment by department

Total first and second year enrollment

multiplied by

Weight for first and second year enrollment (viz. 15%)

plus

Third and fourth year enrollment by department

Total third and fourth year enrollment

multiplied by

Weight for third and fourth year enrollment (viz. 25%)

plus

Circulation by department

Total circulation

multiplied by

Weight for circulation (viz. 30%)

plus

Courses offered by department

Total courses offered

multiplied by

Weight for courses offered (viz. 30%).

This formula thus provides for the total units per department which are then multiplied by the average cost per book to ascertain the unit cost. The allocation per department is then calculated by multiplying the departmental unit cost by the total book budget and dividing the answer by the total unit costs for all departments. The weights and totals of each criterion are constant and ascertainable by dividing the weight of each variable by the total. For example, if the first and second year total enrollment numbers 1145, this figure is then divided into the weights for these enrollment years, viz. 15 and the constant is 0,0131004. (Welwood, 1977:213-9).

6.4.3. PROGRAMME BUDGETING

Jasper Schad considers identified or projected book needs to be the only valid criterion for determining the allocation of funds. After enumerating the various elements that have been used in formula budgeting, and having conceded that this mode of distribution represented a progressive step by virtue of its impartiality, Schad points to two major drawbacks inherent in this technique. These are:

- (a) "the specific needs of the collection are seldom considered directly", and
- (b) "attitudes of control are still dominant."
(Schad, 1970:156).

These defects have led to the ineffective use of resources. Schad's solution lies in replacing the traditional methods of allocation with an approach that is not dominated by the special interests of the teaching departments. Instead it focuses on

the real needs of the collection in its entirety. He says that two developments have provided the theoretical framework which can assist librarians to do this. Firstly, the concept of programme budgeting. This is an objective-oriented planning process which enables available resources to be organised to achieve specified goals. This usually involves assigning priorities because funds are usually inadequate. The second development is the emergence of subject librarians who specialise in collection development. By combining these budgetary and bibliographic concepts, a method of allocation can be produced which will reflect the needs of the collection. A three-step process is involved:

- (a) Collection goals must be formulated.
- (b) Specific needs must be identified.
- (c) Money required to implement the foregoing must be calculated.

Schad suggests a division of the collection into four categories so as to assist in evaluating it. This evaluation is a prerequisite of identifying needs. His groupings include:

- (a) A core collection, which all academic libraries should have.
- (b) A collection to support the undergraduate courses.
- (c) Basic research collections to support post-graduate programmes.
- (d) Comprehensive research collections to support advanced research.

It is necessary for the library however to define areas of emphasis within each discipline and to restrict acquisitions of research material to these fields, bearing in mind resources which are available by means of library co-operation.

Schad is of the opinion that the allocations should be subdivided into two sectors. These would comprise basic allocation and an augmentation. The former would reflect the amount of money required to support or to maintain the collection at the desired level. The latter would enable the collection to be developed to a level of adequacy by providing support for the

purchase of titles identified in systematic bibliographic surveys. Thus the basic allocation would remain relatively stable whilst the augmentation would fluctuate. Schad himself admits that whilst it is easy, theoretically, to determine the relative importance of available literature and the adequacy of existing holdings, it is difficult to do so in practice. (Schad, 1970: 155-9). Moran, on commenting upon Schad's proposal, conceded that his "system at least has the virtue of internal consistency in that proper collection building requires that new acquisitions be related to existing holdings." (Moran, 1978: 91).

The idea of a basic allocation and an augmentation was also introduced at A.H. Robins Company in Richmond, Va., which houses an industrial library. Dillehay was responsible for restructuring the method of book selection as "the crux of the problem seemed to be that traditional methods of book selection have become decreasingly viable and thus alternate means need to be developed." (Dillehay, 1971:510). This re-organisation necessitated a different approach to allocation of funds. This was achieved by determining the approximate total cost of all books published in subject areas of interest to the company, using book review literature. There were in fact thirty-one subject areas, ranging from Anatomy to Virology. This figure of total cost was then broken down into subject categories. A book figure established the availability and the budget figure determined the allocation which was based on the overall ratio of book budget to book allocation. In this way, a book acquisition figure was set which was based on the quantity of publication. (Dillehay, 1971: 509-14). In commenting on this article, Kohut considers the compilation of a book review file to be a distinct advantage as it constitutes an aid in evaluating proposed purchases. With regard to the sub-division of allocation into a basic allocation, which was required merely to maintain the collection, and the augmentation which was designated for developing the collection to desired levels, Kohut sees it as a reflection of an appreciation that allocation has two aspects, viz., an equitable distribution of books.

among funding units and an efficient allocation of funds within each funding unit. (Kohut, 1975:407).

6.4.4. LIBRARY RESOURCE UNITS

McAnally says that "the ideal way to build a library budget should be to build it on unit costs." (McAnally, 1963:166).

This idea of unit costs being the foundation of allocation is also proposed by Kohut. He considers it advantageous to balance periodical with monograph acquisitions. To do so however, it should be done in terms of library resource units, i.e. monographs, periodical parts, microform units, etc., rather than in terms of money. The rationale behind this lies in the fact that the value of the library to its users is determined by its holdings and the proportion of actual monographs to journals. By using library resource units, one is also able to cater for the differential rates of inflation pertaining to the different types of publication and to the various subject areas. An additional benefit deriving from this approach, according to Kohut, is that as every discipline has its own optimal balance between periodicals and monographs, the optimum ratio for the entire library becomes a composite of the ratios for all the teaching units. Finally, the annual output of literature in each subject field is of fundamental importance in determining the optimum proportional distribution of library resources among the departments.

The model Kohut presents deals with the proportion of library resource units to be allocated to the individual departments and the balance between books and periodicals within each department. Thus a book budget (Grand Total (G.T.) = 100%) is to be apportioned among a certain number of departments (N) so that $A + B + C \dots + N = G.T.$ Each department is then sub-divided into a certain percentage of monographs (m) and a complementary proportion of serials (s) which can be expressed as follows:

A	B	...	N	G.T.
Am	Bm	...	Nm	Tm, i.e. total % of budget for monographs
As	Bs	...	Ns	Ts, i.e. total % of budget for serials

The proportional allocation of library resource units among the departments must precede and be made independently of any consideration of the optimum ratio to be achieved between books and periodicals for each department. Where this ratio is important is in adjusting for inflation. Kohut cites the degree of inflation that occurred between 1967 and 1972 when chemistry and physics periodicals rose by 46% and art journals by only 20%. With regard to monographs, sociology and economics increased by more than 50% whereas science only rose by 20%. (Kohut, 1974:192-9).

This article evoked a certain amount of debate. Steven Gold's main criticism centred around Kohut's disregard for economic efficiency. To achieve this, Gold contended, it was necessary to equate marginal benefits and marginal costs for each department. The benefit of a resource unit however, would depend upon the contribution which the library resources made to the educational objectives of the university. This would obviously necessitate the subjective element of value judgements. To achieve efficient size, Gold maintains, it would be necessary therefore, to equate the marginal benefits deriving from each department's allocation of resource units, if possible, with marginal costs. So whereas Kohut considers equity to be the prime goal of budgeting, Gold assumes efficiency. (Gold, 1975:397-402).

Gold's criticism did not go unchallenged. Kohut concentrated his argument on the difficulty in quantifying intangible benefits, such as placing a numeric value on aesthetic appreciation, or on insight, or on joy of discovery. He contends that it is naive to assume that fundamental differences in outlook among the diverse groups comprising a university can be resolved and an objective value measure of benefit devised. He also disputes the usefulness of cost-benefit analysis in instances where benefits are diffuse, mainly non-economic and non-transferable in to standard units of output. To reinforce his stance, he reiterates the four major factors that have influenced formula budgeting. These are:

- (a) Subjective judgements based on collection evaluations and historical inequities.
- (b) Size of academic departments.

(c) Level of courses taught and consequent usage of the library.

(d) Title range.

In each of these, it is the concept of equity and not efficiency that is emphasised. (Kohut, 1975:403-10).

In this connection, it is interesting to note that, whereas the University of Michigan used cost benefit analysis for four of their components, when it came to the fifth, viz., the library materials budget, formula budgeting was employed.

Gold did not let the matter rest. In a letter to the Editor, he accuses Kohut "of using equity as an escape from rationality which can justify anything." (Gold, 1976:369).

Yet another champion of the use of library resource units as the criterion in allocation is Sampson. As Assistant Acquisitions Librarian at Port State University in Oregon, he describes how this method has been in use at his library for the previous two and a half years, in relation to the allocation of funds for monographs only. He claims that having combined it with an internal measurement for inflation, "it has proved to be an effective tool for compensating for differing inflation rates among the various discipline funding units." (Sampson, 1978:381).

The formula used for assigning the book budget is based on the assumption that each department has already been allocated a proportion of the total number of monographic library resource units. Sampson unfortunately does not describe nor even indicate how this initial allocation is made. The formula also presupposes that a record of purchases by department has been kept so that departmental costs can be projected. Expressed algebraically, the equation is:

$$T = X (M_1 U_1 + M_2 U_2 + \dots M_n U_n)$$

where: T = amount of money available for monographs;

X = number of monographs the budget (T) will buy;

M = proportion of monographs allocated to a given funding unit;

U = unit cost of a monograph within a given fund as determined by inflation in that subject.

In the example Sampson provides, he assumes a monographic budget of \$10 000 and three departments. One of these receives 0,5% of the book units at an average price of \$10. The second receives 0,3% at \$15 per book and the third 0,2% at \$30 per title. Thus, with X being the number of books the budget will buy:

$$\$10\ 000 = X (0,5 (\$10) + 0,3 (\$15) + 0,2 (\$30))$$

$$X = 645$$

In terms of volumes and money, the result would be:

Fund 1 : $0,5 \times 645 \times \$10 = 323$ monographs at \$3 230;

Fund 2 : $0,3 \times 645 \times \$15 = 194$ monographs at \$2 910;

Fund 3 : $0,2 \times 645 \times \$30 = 129$ monographs at \$3 870. (Sampson, 1978: 382).

As Sampson notes, this method is only useful if unit costs can be accurately predicted and they have found that internal measurement based on actual purchases has proved to be very close.

The two most notable advantages Sampson sees in using the above model is, firstly, that it neutralises inflation with surprising effectiveness. The second benefit is that it contributes to staff members becoming accustomed to thinking about book budgets in terms of units of what is being purchased, viz., books, instead of in terms of money. (Sampson, 1978:381-3).

6.5. ALLOCATION IN PRACTICE

Bryan gives an overview of the position in Britain. He says that the practice regarding allocation has remained substantially the same over the last two decades. There is the one extreme where in the predominantly self-directing institutions, such as the copyright libraries, the library operations have little formal association with the units of academic administration. The other end of the scale is represented by smaller institutions where the teaching departments exert strong and direct pressure on the librarian. In these cases, available funds are rigorously allocated among the departments. (Bryan, 1976:42).

He goes on to say that the number of instances where the academics actually control or determine the allocation has decreased.

This, he attributes, to the increasing autonomy of the university librarian which has derived in some measure from the establishment of the new universities. These, for the most part, have not adopted the rigidities of the traditional library committee and have tended to leave considerable discretion to the librarians. They have also tended to eschew the rigid departmental structure in favour of an organisation based on schools or areas of study. This development is also obviously reflected in the allocation of funds and a measure of flexibility. He sums up by saying:

"Whatever the formal arrangements, it is clear that the librarian of a British university has the ability to balance his collection-building through the direct control of at least a significant portion of the book vote, and may exercise influence well beyond that portion." (Bryan, 1976:43).

Another profile is provided by Thompson. After summarising the debate between allocation versus non-allocation, he continues:

"All in all, there is very little to be said in favour of rigidly-applied departmental allocations. However, the system is traditional, and what libraries have had to do has been somehow to liberalize it and make it more flexible. One way has been to promote a less possessive interpretation of the word 'allocation'. ... However, the standard and most effective device is to retain a good proportion of the book budget as a general reserve fund, thereby leaving uncommitted money in the librarian's control." (Thompson, 1979:21).

Thompson then enumerates the purposes for which this reserve fund can be used. These include:

- (a) Purchase of an unexpectedly offered collection;
- (b) Reference material;
- (c) Additional assistance to a particular subject area;
- (d) Ad hoc grants to some departments;
- (e) Multiple copies.

The system adopted by Lancaster University Library is described by Hindle. Two basic assumptions were made at the outset:

- (a) Use is an important criterion of success for some types of material;
- (b) Needs of research require collection building and that very low levels of use in this sphere can be justified.

As an experiment, three departments were requested to code their orders in terms of primary intended use. Three categories were provided: U for undergraduate; P for post-graduate; and R denoting research. The actual use made of the material ordered was recorded. This demonstrated that the attempts to differentiate intended acquisitions by type of intended use were valid. Other factors noted that influenced circulation were reading lists and the reduction of the loan period. A new acquisitions system was subsequently formulated. This involved the division into two categories: R for research related materials and T indicating teaching related materials, for all acquisitions. This led to the budget being split accordingly with the R budget being allocated to the departments on the basis of the number of academic staff members and the T budget being retained centrally. When an academic requested the purchase of a title, he would decide into which of the two groups the book would fall. If it was R, the library staff only made routine checks. These involved making sure the material was not already in the library; that there was sufficient money to cover the purchase; and inserting missing bibliographical details, if necessary. If the request fell into the T category, it would then be checked against criteria of expected demand as it was felt that the librarians were in a better position to monitor student demand. They also received greater feedback concerning low availability of high demand titles. For this purpose, a special form was designed for T material. This form made provision for the inclusion of:

- (a) Bibliographical details;
- (b) Price;
- (c) Number of pages;
- (d) Names or numbers of courses for which it was recommended;
- (e) Number of students involved;
- (f) Type of recommendation, e.g. essential reading; background reading, etc.
- (g) Titles it would replace, if any. (Hindle, 1977:2-39).

SPEC also reproduces formulae used at some North American university libraries. At Colorado State University, the library materials budget is allocated to broad subject divisions using thirteen criteria. Ten of these relate to teaching and research and three to publishing. These are assigned numerical weights. There is also a general fund for the purchase of multi- and inter-disciplinary materials, and special funds which may be allocated at the discretion of the university librarian. Their formula is continually reviewed. (A.R.L., 1977: [20-29]).

The University of Washington in Seattle circularises the departments about their budgets. (A.R.L., 1977: [50-52]).

Three factors are emphasised by the Berkeley campus of the University of California. These are:

- (a) Programme pressures which include enrollment figures, both staff and students, and circulation statistics;
- (b) Cost factors, such as book and periodical prices, and title range;
- (c) Long term research demands. (A.R.L., 1977: [54-57]).

At the University of California (Davis Campus Library), current publications have priority over retrospective material and sharp limitations are placed on any additions to periodical subscriptions. (A.R.L., 1977: [58-72]).

A Librarian's Reserve Fund is an integral feature of allocation at UCLA. This is because it permits flexibility. The Library has a Current Books Fund for monographs, but no attempt is made to assign specific amounts of this fund to departments as much of the material acquired is of an inter-disciplinary nature. Other funds include a Continuations/Subscriptions Fund; Standing Orders Fund; Reference Material; Exchanges; Replacements Funds. In addition, because UCLA has area as opposed to subject specialists, they also have area allotments. Departments are assigned Subject allotments. (A.R.L., 1977: [73-77]).

The University of Western Ontario insists on each academic department supplying the library with a collection policy statement. This outlines what is required to support the existing instructional

and research programmes and indicates the priorities which exist with respect to those needs. (A.R.L., 1977: [97-99]).

Princeton University advocate that 70% of the library materials budget should be allocated to the departments, 5% is earmarked for general purchases of an inter-disciplinary nature and 25% is initially unallocated. This 25% constitutes a Contingency Fund to be used at the discretion of the University Librarian. They provide for the transfer of allocated funds and insist upon a review of unusually expensive items. Emphasis is also placed on the need for a selection policy and the development of a suitable process for formal collection evaluation. (A.R.L., 1977: [92-96]).

In the view of SPEC, three steps are needed in a budgetary procedure. These are allocation, monitoring and evaluation. The second step is imperative as it determines the value of the procedure as a device. (A.R.L., 1977: 6-7).

Having surveyed the literature on allocation, Schmidt's prognosis of the future development of libraries is relevant. He feels that university libraries will be dealing with the management of decline for the remainder of the present century. He expects enrollments to peak by 1980 and then decline to such an extent that he estimates there will be a third less students by 1985. He bases this assertion on the differential reward for degree holders which decrease as the percentage of graduates increase. He is also of the opinion that the present job market for graduates has been adversely affected by the economic climate. Schmidt thus considers that libraries will have to alter their priorities from holdings to access. This shift of emphasis will allow for major redeployment of staff which will entail resource allocation becoming less focused on acquisitions and more on personnel. (Schmidt, 1975:643-8).

A similar conclusion, viz., the swing in emphasis from holdings to access, was made by de Gennaro, as noted earlier. He arrived at this position basing his contention on less materialistic grounds. (de Gennaro, 1975:917-23).

SECTION 2 : UNIVERSITY FUNDING

CHAPTER 7

*FUNDING OF SOUTH AFRICAN UNIVERSITY LIBRARIES
UNDER THE AEGIS OF THE DEPARTMENT OF NATIONAL EDUCATION*

South African universities are not unique in being dependent upon the state for the greater portion of their revenue. In 1974, universities in Australia, New Zealand, Scotland and England were receiving in excess of 70%, whereas the percentage in South Africa at that time was 64%. Currently however, local universities that come under the jurisdiction of the Department of National Education, with student enrollments in excess of 8 000 students, receive 75%, whereas the smaller universities with fewer than 2 000 students receive 85%. (de Vries, 1974:361).

Additional sources of income are derived from students' fees, and possibly from bequests, donation fund investments, grants from public bodies, etc. The state subsidy is predetermined by the guidelines laid down by the van Wyk de Vries Commission, whose report was published in 1974.

Prior to the adoption of the above Commission's recommendations, the state had subsidised tertiary education according to proposals submitted by earlier commissions and committees. These included:

- The Thomson Commission in 1910 (Thomson, 1910);
- The Laurence Commission in 1914 (Laurence, 1914);
- The van der Horst Commission in 1928 (van der Horst, 1928);
- The Adamson Committee in 1933 (Adamson, 1933);
- The Du Toit Committee in 1944 (Du Toit, 1944);
- The Holloway Commission in 1951 (Holloway, 1951);
- The Cilliers Committee in 1961 (Cilliers, 1961).

As this study is concerned with the present situation, a discussion of their findings (with the exception of the Holloway Commission, and passing reference to the Cilliers Committee), is beyond the scope of this thesis. The Holloway Commission's proposals constituted a watershed as far as university libraries were concerned, as prior to their adoption, there was no specific provision

in the state subsidy, for university libraries.

7.1. HOLLOWAY COMMISSION

In the report of the Commission of Inquiry into University Finances and Salaries, chaired by J.E. Holloway, the following assertion is made:

"As a result of the financial stringency under which universities have laboured during the past few years, additions to book-stocks have not kept pace with the output of new and necessary material, and each library is faced with a shortage of possessions which, with the ever-increasing costs of printed material, it cannot hope to overcome by expenditure from its current revenue." (Holloway, 1951:89).

One of the reasons for this was the methods employed in calculating the state subsidy, which were "both too simplified and too inelastic." (Holloway, 1951:26). During the 1949 - 1951 triennial, the state decided how much it would allocate to universities annually without any regard to increasing student numbers or escalating costs. Prior to this period, the state subsidy had been based on formulae which related either to the expenditure or to the income of a university.

The Holloway Commission made a number of recommendations, which included, inter alia, the categorisation of the needs of the universities for the purpose of calculating subsidies.

These categories comprised:

- (a) Basic teaching needs, irrespective of student numbers;
- (b) Teaching needs in relation to student enrollment;
- (c) Cost of living allowances.

Suffice it is to say with regard to the third category that these allowances were incorporated into the standard salaries in 1959.

Returning to basic teaching needs, a Basic Subsidy was introduced to make provision for certain teaching departments in each of a university's approved faculties, whose existence operated with Ministerial approval.

The teaching needs were divided into eight sub-divisions.

These were:

- Humanities;
- Natural Science;
- Commerce and Administration;
- Education;
- Applied Sciences;
- Medical Science;
- Dental Science;

and others, such as Divinity, Music, Fine Arts and Surveying. Complementary to the teaching needs were the supportive services of administration, library and laboratory together with maintenance and other recurrent needs. All these 'needs' were catered for by the adoption of a Standard Provision. So as to avoid penalising the smaller universities, a ratio between the Standard Provision and Fee Income was introduced. This was referred to as the Standard Fee Ratio. (Holloway, 1951:28-47). Provision was also made for the formulae to be revised every five years.

Fundamental to the subsidy formula proposed was the concept of student numbers. (Holloway, 1951:42). The Commission reported that from the evidence placed before it, it concurred with what experts in the older countries considered essential. This was that both from the point of view of the staff and from that of the annual increase in holdings, the annual expenditure on a university library should bear a specified relationship to the number of students. (Holloway, 1951:44).

The result of the adoption of the Holloway Commission's recommendations was the raising of the degree of state aid for total university expenditure from 47,82% in 1951 to 67,24% in 1953 when the formulae were fully implemented. (Cilliers, 1967:3).

7.2. CILLIERS COMMITTEE

The Cilliers Committee's proposals were adopted in 1963. These recommendations were based on the five props which characterised the Holloway formula, viz., Basic Subsidy, plus Standard Provision less Standard Fee Income. In addition, there was Capital and Loan Provision and Student Bursary and Loan Provision.

The effect of the adoption was to further increase the percentage of state subsidy from 66,5% to 71,0%. (Cilliers, 1961:181).

This was achieved partly by the inclusion of a Research Provision. Such a provision had in fact been advocated by Holloway in a somewhat modified form. He had suggested augmenting the income of the universities for research work by grants which would be decided annually by the proposed University Grants Commission for South Africa. (Holloway, 1951:95-96). However, the recommendation for the establishment of such a Commission was not adopted and thus the subsidisation of research was not realised. Cilliers' suggestion was that the Research Provision, like the Basic Subsidy, should not be subject to reduction for purposes of total state subsidy by the operation of the Standard Fee Ratio. Rather, it should constitute a percentage of the teaching component. The percentage advocated was 2%. (Cilliers, 1961:206).

Professor A.C. Cilliers followed up his 1961 report with a Revision of the Subsidy Formulae for the Universities for the quinquennium 1969 - 1973. (Cilliers, 1967). This report however was not adopted, one of the reasons being that it was acknowledged that a more fundamental investigation be carried out by a panel of experts operating on the level of a formally appointed government Commission under the chairmanship of a judge.

The next subsidy formula implemented therefore, was that recommended by the van Wyk de Vries Commission. (de Vries, 1974).

7.3. VAN WYK DE VRIES COMMISSION

This Commission's terms of reference included, inter alia, a consideration of an "adjustment of the Holloway formula (as amended from time to time) or the devising of a new formula for the subsidisation of universities to meet present day requirements in respect of current and capital expenditure." (de Vries, 1974: 2). The Commission commenced by summarising the functions of a university. These were itemised on page 2 under the chapter heading 'University Library Objectives'. However, the prime function, which was not quoted in full, was described as advancing

"learning by bringing to light the knowledge amassed through the ages, by systematising it, by incorporating every facet into the various disciplines as a component of the whole structure of knowledge, and by new discoveries through investigation and research. The primary concern is basic knowledge and research ... Broadly speaking, therefore, the humanities, the natural sciences and the applied sciences are involved." (de Vries, 1974:31-32).

7.3.1. CRITICISMS OF EXISTING FORMULAE

Its main criticism of the formulae then currently in operation, revolved around:

- (a) Using student numbers or student courses for the previous year which did not provide for the rapid variations (increases or decreases) in enrollments;
- (b) Lack of provision for increased costs, both recurrent and ad hoc, as in library materials, laboratory equipment, salaries, and capital, such as new buildings;
- (c) The variation between large and small universities of the Standard Fee Ratio, which was determined by student numbers;
- (d) The anachronism of using approved subsidy courses as a criterion, as no university offered any course that was not an approved subsidy course;
- (e) Complicated formulae which were difficult to interpret and thus were prone to irregularities and incorrect application. This was very apparent in the area of ascertaining teaching needs in relation to student numbers, because this component comprised eight sub-divisions, and each had its own formula. (de Vries, 1974:323-7).

In essence, the criticisms arose from the fact:

"that the present formulae are not founded on the prevailing realities at the universities but that, their operation is based on elements that no longer exist or have changed. The existing formulae would work well if the growth of a university and price fluctuations took place gradually and evenly, but have proved unequal to rapid development in times of sharp price changes and inflation." (de Vries, 1974:323).

The Commission therefore "set itself the task of devising a new formula in which the sound elements of the Holloway formula would be retained." (de Vries, 1974:327).

7.3.2. BASIS OF FORMULA

The Commission found that the only area in which it could lay down a formula was in relation to teaching costs, because "one of the first requirements for an effective formula is that it must be manifestly founded on the real position at a university." (de Vries, 1974:318). It postulated that if a student/staff ratio could be determined for the purposes of the new formula, there would be an element which would be based on an objectively ascertainable factor. This would be the actual number of students. Student enrollment would then determine the number of teaching staff and this would indicate teaching costs to an appreciable extent. A financial analysis of teaching costs had already established that academic salaries constituted 55% of the total. (de Vries, 1974:327).

Student enrollment was also used in formulating the library subsidy, as the Commission found "time and again, it was ... taking the student as the unit [that] was, after all, the best method." (de Vries, 1974:330).

7.3.3. LIBRARY SUBSIDY : STAFF

The library subsidy is based on two components. The first relates to staff. The salaries of library staff are tied to a prescribed percentage (6%) of the cost of the additional teaching and the academic auxiliary staff, which in turn are determined by student numbers. In addition, provision is made for a university librarian at professorial rank. The second component comprises the library materials budget, which is directly related to student numbers. (de Vries, 1974:337). Despite the Commission's assertion that "the intensity of teaching and research in the university as a whole has a close bearing on the size of the library staff", no latitude was allowed for decentralised library systems, such as those of the older universities. (de Vries, 1974:337). The only concession made by the Commission was regarding the University of Natal, which at the time, was the only university with two campuses in South Africa.

As mentioned above, decentralised library systems require

duplication of services, which involves staff. The Commission however draws a distinct differentiation between the basic needs of the teaching staff and those of the library staff. With regard to the academics, allowance is made for a "prescribed minimum number of posts [which] is intended to keep the academic activities of a university going, even if there are only a few students, and therefore relates to the wideness of the academic spectrum covered by a university rather than the number of students studying at a university." (de Vries, 1974:334). In addition, for "the calculation of the cost of the minimum number of staff, the Commission is taking these posts as professorships at the maximum notch on the scale for a professorship, so as to ensure the high quality of this staff." (de Vries, 1974:335). The difference is that only the university librarian is regarded as a "basic need" in the library, although the library is intended to supplement and complement the academic activities of a university comprised of all members of staff (basic or otherwise) and students.

What implication does the 6% of additional teaching and academic auxiliary staff have on the percentage of the total library budget earmarked for salaries?

The Commission in fact calculate the costs in order to demonstrate the effect of the implementation of their proposed formula for the years 1970 to 1974 inclusive. (de Vries, 1974: 369-77).

University	1970	1971	1972	1973	1974
Cape Town	56,34	59,50	59,29	59,21	59,60
Free State	55,80	59,04	58,77	58,43	58,40
Natal	55,28	58,45	58,30	58,16	58,12
Port Elizabeth	59,12	61,25	60,96	60,18	59,99
Potchefstroom	55,61	58,64	58,44	58,23	58,22
Pretoria	56,36	59,28	59,32	59,42	59,36
Rand Afrikaans	58,35	61,10	60,17	59,80	59,40
Rhodes	57,28	60,00	60,00	60,09	59,88
Stellenbosch	55,95	58,99	58,83	58,91	58,86
Witwatersrand	56,40	59,40	59,47	59,79	59,49
UNISA	54,78	57,74	57,70	57,60	57,70
AVERAGE	56,48	59,40	59,20	59,07	59,00

How does the South African formula and these percentages compare with libraries overseas?

The formula for staffing at Texas University in 1963 was also allied to student enrollment, but directly, reports McAnally. The ratio of professional librarians decreased with an escalating enrollment whilst the ratio of clerical positions within the library increased in direct proportion to student numbers. The ratio used was 1 : 300 for the first 1 500 F.T.E. students; 1 : 400 for the next 1 500 and 1 : 500 for all F.T.E. students in excess of 3 000. The clerical scale was 1 : 300 for the first 1 500 F.T.E. students; 1 : 250 for the next 1 500 students and 1 : 200 for all over 3 000. This formula, as well as those used in respect of the State universities of New Jersey, Florida and New York, use sliding scales according to the size of the student body. Florida universities however add an extra $\frac{1}{2}$ unit for students enrolled or served by branch libraries as a recognition of added service costs. (McAnally, 1963:159-71).

An investigation conducted by Booz, Allen and Hamilton, Inc., into the organisation and staffing of the Columbia University libraries revealed that 67% of the total library budget was committed to salaries and wages. 28% was spent on books, serials and binding and 5% on supplies and sundries. (Booz, 1973:34).

In another American survey of ninety eight university libraries, it was found that the average spent on salaries was 63,4%, with 31,9% on books and journals and binding, and 4,7% on miscellaneous items of expenditure. The libraries were then ranked according to collection size and the following factors emerged. Libraries with book stocks in the 600 - 900 thousand category spent less on salaries, viz. 61,87% than the largest. These had stock that ranged from 1 400 - 3 000 thousand volumes, and salaries constituted 67,59% of the budget. The smallest libraries however, those with holdings of less than 350 thousand volumes, spent 64,21% on salaries. (Harrer, 1957:210-2).

The increase in the amount spent on salaries between 1957 when Harrer's article was published and 1973 when Booz presented

his findings to Columbia, reinforces the observation made by the Parry Report. This was that in view of the development in services to readers, the cost of staffing would inevitably increase. This however, is not the sole contributory factor. The cost of living has in fact proceeded at a faster rate than the increases in the cost of books, and as budgets have not been allied to the cost of living index, it has been the library materials budget that has subsidised salaries. (U.G.C., 1967:151).

In a British survey, an analysis of university libraries during the period 1971 - 1972 showed a national average of 51,1% being spent on salaries. The average however, hid the disparities among individual institutions. London University College spent 70,2% of its library budget on salaries, with the London School of Economics and Reading University spending 63,9% and 63,7% respectively. At the other end of the scale were Brunel University with 32,8% and Manchester University with 40,7%. (Bryan, 1976:32-33).

Bryan also referred to the differences in Australian universities. While the Australian National University devoted 64,1% of its budget to salaries in 1974, Murdoch's commitment was only 44,7%. (Bryan, 1976:38).

Another British survey on university library expenditure was conducted by the National Book League for the years 1969 - 1975. This reveals that during the period 1969 - 1970, 27% more was spent on staff than on library materials for each student. Between 1974 - 1975 however, the percentage difference had almost doubled to 49,7%. (N.B.L., 1977:7).

7.3.4. LIBRARY MATERIALS

The second component relates to the library materials budget. In this connection, the Commission expressed itself as not being "in favour of an amount per [teaching] department", but of a specific amount per student. (de Vries, 1974:337). This varied however in accordance with three broad areas of study, so as to achieve a balance between the range of prices relating to library materials in the three categories. The

groupings are:

Group (i) which includes Holloway's Humanities, Commerce and Administration and Education as well as degrees and diplomas in Nursing and Nursing Education.

Group (ii) covers Holloway's Natural and Applied Sciences, together with degrees and diplomas in Agricultural Science, Occupational Therapy, Physiotherapy, Radiotherapy, Radiography, Optometry and all first year students from Group (iii).

Group (iii) incorporates the Medical, Dental and Veterinary Sciences.

These groups, for the sake of brevity, were subsequently identified as Group (i) Humanities; Group (ii) Natural Sciences; and Group (iii) Medical Sciences. (de Vries, 1974:342-4).

One of the prime reasons for the above groupings lay in the fact that the teaching costs were found to be comparable within the groupings and hence student/staff ratios for the groups could be determined, as "ratios are a keystone of the new formula." (de Vries, 1974:343).

Not only were the groupings used in establishing ratios between students and staff, they were also used in calculating library materials. The Commission advocated that a specific amount per student, varying according to the three groups, should feature in the formula. At the time the report was compiled, it was estimated that R20 per student in the Humanities, R25 per Natural Science student and R30 per Medical student was sufficient and would enable the library to purchase "at least three volumes per year per student." (de Vries, 1974:351). This would permit the libraries, if student numbers remained constant, to double their stocks within the ensuing two decades.

Just as the ratios between student and staff were regarded by the Commission as "adjustable elements of the formula", so too the Commission regarded the figures of R20, R25 and R30 to be variables. (de Vries, 1974:345). They in fact suggested the organisation of a cost index which could update the increase in book and periodical prices. (de Vries, 1974:351). This in fact has been done and the subsidy in 1978 stood at R53 for the Humanities, R75 for the Natural Sciences and R89 for the Medical Sciences.

Whereas Professor Cilliers had refused to recommend the

concept of student weighting (Cilliers, 1961:191-2), the van Wyk de Vries Commission acceded to the proposal which had been put forward by the Committee of University Principals. (de Vries, 1974:341). The weighting regarded all undergraduates and non-graduate diploma students as single units for a period not exceeding two years longer than the minimum period required for obtaining the degree or diploma in cases of three- and four-year curricula, and three years where the curricula exceeded four years. Honours students were weighted as two units for a period of one year only. Students doing a master's or doctor's degree were regarded as three units, but in the case of master's students, the subsidy is for one year only, whereas doctoral students are subsidised for two years. Finally, part-time students are calculated at 0,75.

The Commission also concluded that there were operating expenses connected with teaching which did not fall under the headings already covered. These were labelled "General Operating Expenses" and comprise Part F of the formula. Included under this heading are twenty sub-divisions, with the library as the second. The expenses itemised under the library embrace wages, stationery, printing, binding, photographic expenses, postage, telegrams, travelling and other related items of expense. The recommended percentage as laid down by the Commission for "General Operating Expenses" in a university which has in excess of 7 000 students is 13% of the total university budget. (de Vries, 1974:353-5).

Using once again the schedules incorporated in the report, the percentages of the university budgets as provided by the State that are earmarked for the library, excluding the amount available under "General Operating Expenses" can be seen.

7.3.5. RECOMMENDED PERCENTAGE OF UNIVERSITY BUDGET

University	1970	1971	1972	1973	1974
Cape Town	7,53	7,31	7,38	7,34	7,43
Free State	6,46	6,40	6,58	6,70	6,87
Natal	6,60	6,03	6,16	6,06	6,09

University	1980	1971	1972	1973	1974
Port Elizabeth	5,57	5,59	5,62	5,63	5,80
Potchefstroom	6,69	6,61	6,81	6,94	7,13
Pretoria	7,57	7,41	7,42	7,41	7,44
Rand Afrikaans	5,73	5,70	5,85	5,85	5,98
Rhodes	5,99	5,87	5,83	5,68	5,70
Stellenbosch	7,41	7,26	7,33	7,34	7,39
Witwatersrand	7,48	7,37	7,28	7,17	7,22
UNISA	9,00	8,80	8,80	8,67	8,68

These percentages do not include the separate provisions made by the formula for the four universities which have faculties of agriculture and veterinary science, viz., Pretoria, Stellenbosch, Natal and Free State. The calculations derive from the addition of the salaries and library materials budget divided by the total state subsidy under the proposed formula. The variations are due not only to fluctuating student enrollment but also to the changing ratio of students in the three groupings of Humanities, Natural and Medical Sciences.

A final word from the Parry Report is relevant. Having noted that the cost of scholarly monographs and periodicals is increasing at a faster rate than that of other publications, and that the current trend is for the annual world output of books and journals of academic interest to double in about fifteen years, it recommends:

"that in real terms the cost of maintaining relative standards in university libraries may rise faster than other university costs. Thus an allocation of a fixed share of university revenue to libraries would entail a relative decline in library standards."
(U.G.C., 1967:156).

FUNDING OF THE LIBRARIES AT THE
UNIVERSITY OF CAPE TOWN

The van Wyk de Vries Commission's recommendations have been summarised in so far as they affect university libraries. It has been ascertained that the state subsidy comprises two components:

- (a) Staff salaries allocation are prescribed, being tied to 6% of the cost of the "additional teaching staff and ... academic auxiliary staff", which in turn are determined by weighted student numbers. (de Vries, 1974:350). In addition, provision is made for a university librarian remunerated at professorial level.
- (b) Library materials allocation, which is based on weighted student numbers, divided into three broad disciplinary categories: Humanities, Natural and Medical Sciences. For each weighted student in these three wide fields of knowledge, a specified amount is allocated. In order, however, to maintain the purchasing power of the library materials budget, these amounts are updated annually according to a cost index.

As this study is concerned with the distribution of the state's subsidy earmarked for the acquisition of library materials with special reference to the University of Cape Town, it is necessary to describe and discuss the current method of funding.

8.1. PERCENTAGE OF TOTAL UNIVERSITY BUDGET

In 1978, the University of Cape Town (UCT) had 10 762 students, weighted as per the van Wyk de Vries formula. In terms of the formula, their contribution would have realised R692 650.² However, the state subsidy to the University as a whole was reduced by 12,06% in 1978, resulting in a corresponding decrease in the allocation for the purchase of library materials to R609 116. This amount, together with the salaries budget, would have constituted 6,52% of the nett university budget.

It is important to distinguish between the nett and gross

² See Appendix 1

budgets. The latter includes such items as pension, group life assurance, medical contributions, housing subsidies, vacation bonuses, interest and redemption, etc. These factors have been disregarded in the schedules worked out by the Commission to illustrate the effect of the introduction of their formulae. (de Vries, 1974:369-77). Thus the percentages to which the library should be entitled should be gauged against the university's nett budget.

How does this 6,52% for 1978 compare with the recommendation made by SCONUL and supported by the U.G.C.? In support of their proposal, SCONUL itemised the factors that should be considered in relation to recurrent grants. These included:

- (a) Amount of literature published in each subject taught in the university;
- (b) An appreciation of the amount of literature published in disciplines which may not be taught, but in which collections may be maintained;
- (c) The extent to which the library serves as the laboratory, as in the humanities;
- (d) Average cost of publications in the various disciplines;
- (e) Depth and range of commitment in the discipline. (U.G.C., 1967:265).

These factors are universally applicable with regard to university libraries. There are however other factors that could apply, and therefore warrant consideration:

- (a) Number of disciplines and branches thereof in which teaching and research are carried out in the university;
- (b) Depth of research in each discipline and the range of interests among the teaching staff - a consideration particularly applicable in disciplines where research is carried out by individuals as opposed to teams;
- (c) Extent to which the topography of the university necessitates the establishment of branch libraries, thus leading to duplication of services and some stock;
- (d) Special responsibilities : These may include

substantial special collections; archives and manuscripts, all of which must be maintained.

SCONUL regards duplication of materials for undergraduates as a distinct problem, but also warranting inclusion in the recurrent grant, i.e. money that is received annually without motivation.

The Parry Report upheld the SCONUL recommendations and stated:

"The annual cost ... of library provision in a university of medium size would amount to about 6 per cent of the budget of such a university. Circumstances vary, and it would be undesirable and impracticable to impose standards centrally; but we believe that this represents a standard below which British university libraries should not be allowed to fall." (U.G.C., 1967:156).

And again, referring to the 6%: "This ... is not a large proportion in relation to the significance of the library within the university." (U.G.C., 1967:151).

The criteria which influenced SCONUL bear virtually no relationship to those that were considered by the Commission. One could possibly argue that by weighting of students engaged in post-graduate work, research would be catered for, but no provision has been made for a library subsidy for academic staff. Average cost of publications is in fact the only other common denominator. Yet the average 6,64% of the nett budget of South African university libraries (excluding UNISA) which are funded by the Department of National Education, for the years 1970 - 1974 inclusive was the end result of the implementation of their formulae. This compares more than favourably with the recommendations of SCONUL supported by the U.G.C.

Instead of the R609 116 deriving from the library provision in the Commission's recommendations, U.C.T. libraries in fact only received R361 082 for the purchase of library materials. Thus, instead of the 6,52% the library should have received, it was only given 5,24% of the nett or 3,84% of the gross total. Bequests and donations added an extra R15 837 making a library materials budget of R376 919.

8.2. ALLOCATION OF LIBRARY MATERIALS BUDGET FOR 1978

Of this budget, R175 997, i.e. 46,69% was committed to the payment of periodical subscriptions out of a consolidated fund known as the General Periodicals (G.P.) Fund. This left a balance of R200 922, of which R30 365, i.e. 8,06% of the library materials budget, was allocated in specific amounts for the purchase of reference material, duplicate copies, replacements, standing orders, exchanges, non-book material, staff professional works, and general literature.

Another R27 611 (7,33%) was reserved for launching and contingency grants. (The launching grants which are non-recurrent and range from R200 to R300, are made to new members of the teaching staff appointed to, and current members promoted to, senior lectureships and above. The contingency grants are made available to the teaching departments on application twice yearly. They are intended specifically for the purchase of expensive items or back runs of journals. However, they may be used for less costly library materials).

The residue, viz. R142 946 or 37,92% was divided among ten faculties³ and six inter-faculty units.⁴ The library is then advised by the faculties of the allocations to their departments.

Prior to 1979, the formula on which the allocation had been based had been modified over the years. This had come about as a result of the incorporation at times of ad hoc amounts into the annual recurrent money and requests from faculties for additional annual recurrent which had been granted either partially or in toto. Thus there was no longer a consistent rationale determining allocation.

The 1978 share of the library materials budget to the faculties, inclusive of annual recurrent and ad hoc money, was:

³ Faculties are : Arts; Commerce; Education; Engineering; Fine Art and Architecture; Law; Medicine; Music; Science. Social Science.

⁴ Inter-faculty units are : Centre for Extra Mural Studies; Central Acoustics Laboratory; Electron Microscopy Unit; Environmental Studies; Professional Communication; Teaching Methods Unit.

Faculties	Percentage
Arts	29,71
Commerce	6,10
Education	2,13 ⁵
Engineering	5,77
Fine Art and Architecture	4,55
Law	6,88
Medicine	17,55
Music	1,61
Science	16,49
Social Science	6,41
Inter-faculty units	2,80 ⁶

These percentages are based on the figure of R142 946, which includes the bequests and donations to the faculties, as opposed to those that have been made to the library for maintaining specific collections. However, should these additional amounts be excluded, the allocations are reduced to R132 788, with the resultant percentage share of the budget:

Faculties	Percentage
Arts	31,60
Commerce	6,57
Education	1,32
Engineering	6,13
Fine Art and Architecture	4,62
Law	2,83
Medicine	17,84
Music	1,73
Science	17,44
Social Science	6,90
Inter-faculty units	3,02

⁵ Education's normal allocation constitutes 1%, but in 1978 they were awarded an additional ad hoc for that year only.

⁶ See Appendix 2

8.3. FORMULA ADOPTED FOR 1979

This distribution gave rise to considerable dissatisfaction on the part of some faculties who felt that the allocation was inequitable. A Sub-committee of the Library Committee was constituted in 1977 to investigate the entire question of allocation, and the formula provisionally adopted in 1978 for partial implementation in 1979 incorporated only the following features:

- (a) Differentiated student enrollment figures, i.e. 1 unit per first year student; 3 units per balance of undergraduates; 6 units per Honours students and 10 units for all Master's and Doctoral students. Because of fluctuating numbers, it was decided to take the average over the preceding three years as the enrollment figure.

There were some minor modifications:

- (i) As many Law students do a B.A.LLB., one third of the first year Law students were credited to the Arts Faculty.
- (ii) All first year Medical students (excluding the paramedics⁷) and all first year Engineering students were credited to the Science Faculty as their respective curricula prescribe their first year to be a straight B.Sc.
- (b) Estimated reading need tied to range of available monographic titles of academic relevance to U.C.T. In order to ascertain title range, the BNB's latest annual volume (i.e. 1976) was used. As allocations are made to faculties and not directly to departments, the entries relating to the faculty classification numbers were counted. Thus a ratio could be determined. The following figures were extrapolated:

Faculty	Number of titles	Percentage	Ranking order
Arts	12 930	44,9	1
Commerce	2 010	7,0	5
Education	960	3,3	9
Engineering	1 710	5,9	7
Fine Art and Architecture	2 040	7,1	4

⁷Paramedics include: Logopaedics; Occupational Therapy; Physiotherapy; and Nursing.

Faculty	Number of titles	Percent- tage	Ranking order
Law	1 290	4,5	8
Medicine	1 830	6,4	6
Music	390	1,4	10
Science	3 150	10,9	2
Social Science	2 460	8,6	3

A comparison correlating the ranking order of title range as shown above with UCT's shelflist of monographs demonstrates an apparent weakness in stock in some disciplines, which could give a lead to areas warranting priority when the holdings are evaluated, and strengths in others:

Faculty	Shelf- ⁸ list	Percent- tage	Ranking order of shelflist	Ranking order of title range
Arts	164 718	45,19	1	1
Commerce	6 660	1,83	10	5
Education	17 220	4,72	5	9
Engineering	12 786	3,51	7	7
Fine Art & Architecture	35 160	9,65	3	4
Law	11 910	3,27	8	8
Medicine	48 360	13,27	2	6
Music	6 870	1,88	9	10
Science	30 780	8,44	4	2
Social Science	15 000	4,12	6	3
Generalities	15 000	4,12		
Total	364 464 ⁹			

⁸ Jenks' measurement of 120 cards to the inch was used in these calculations. (Jenks, 1976:145-52).

⁹ This figure does not coincide with the 1978 statistical report as: (a) multiple copies do not have separate cards;
(b) non-academic books, such as text books for schools and children's literature have been excluded;
(c) multi-volume works are entered on the same set of cards.

The assessment of reading need however could not be gauged objectively. A criterion that could have been used as an indication would have been circulation statistics, which has the advantage of converting a subjective evaluation into an objectively verifiable one. (McGrath, 1975:356-69). However, at U.C.T., the issue system is not yet computerised, and the manual method employed involves only a gross count. One can however determine broad guidelines by using circulation statistics, inclusive of Short Loan, for the branches and one 'link' which serve specific faculties either predominantly or exclusively. Also included are the figures for Jagger, which is the main library, which in 1978 served the Faculties of Arts, Commerce and Social Science.

Faculty	Registered library users	Books and Periodicals issued	Average item per user
Education	494	21 156 books 993 pers	42,8 2,0
Law	303	36 790 books 1 256 pers	121,4 4,1
Medical incl. I.C.H.	2 119	61 732 books 19 072 pers	29,1 9,0
Music	491	8 075 books 429 pers	16,4 0,9
Engineering and Science	2 499	33 176 books 10 236 pers	13,3 4,1
Arts; Commerce & Social Science	4 698	297 552 books 50 522 pers	63,3 10,8
Architecture & Hiddingh Hall incl. Speech and Drama	766	26 258 books 4 297 pers	34,3 5,6

What is shown up in this exercise is:

- (a) Students and staff of the Faculty of Medicine average 29,1 book and 9,0 periodical issues per individual, and their literature constitutes 6,4%, and yet they have only been accorded 2,8 estimated reading need.
- (b) The Faculties of Science and Engineering, whose joint title range is just 2% higher than that of the Faculty of Medicine, only average 13,3 books and 4,1 periodicals and have been accorded 3,5 and 2,5

respectively on the reading need scale.

- (c) Law Faculty, whose reading need has been estimated at 4,0, have a title range of 4,5%, but their issues stand at 121,4 book and 4,1 periodical issues per user.
- (d) The figures for Arts, Commerce and Social Science are not conclusive as it is impossible to get even approximate Faculty breakdowns.
- (e) The figures for Architecture and Hiddingh Hall include those for Speech and Drama personnel, who in fact are attached to the Faculty of Arts.
- (c) Average book and journal prices is the third constituent of the formula. This is a variable which can easily be determined. It may be done by using published figures such as appear for monographs at six-monthly intervals in Average prices of British academic books, published by the Loughborough Management Research Unit, or annually for books and journals in the Library Association Record.

The drawback of using figures from the Library Association Record is that the united index contains about 25% of journal subscriptions to which U.C.T. does not subscribe.

The method employed at U.C.T. was to determine the average of the last three hundred books accessioned for each faculty. The average journal price was taken from faculty subscriptions which are not covered by the general periodicals fund.

Multiplying (a), (b) and (c) produced the figure which was used to determine the final factor.

Thus the revised formula recommended the following percentages to be allocated to the faculties:

Faculty	Percentage
Arts	25,6
Commerce	8,0
Education	1,6
Engineering	7,7
Fine Art and Architecture	5,7
Law	7,6
Medicine	19,4
Music	1,2
Science	17,4
Social Science	5,6

10

The adoption of these percentages modified the previous allocation (excluding donations and bequests) to the following degree:

Faculty	Percentage
Arts	- 6,0
Commerce	+ 1,43
Education	+ 0,6
Engineering	+ 1,57
Fine Art and Architecture	+ 1,08
Law	+ 4,77
Medicine	+ 1,56
Music	- 0,53
Science	- 0,04
Social Science	- 1,3

8.4. ANOMALIES IN FORMULA

8.4.1. GENERAL PERIODICALS FUND

Discounting for the time being the merits or demerits of the variables used, the outstanding omission is the total disregard of the money committed to the General Periodicals (G.P.) Fund, viz., R175 997 or 46,69% of the library materials budget.

A brief synopsis of the G.P. fund is called for at this juncture. Prior to 1971, a periodical ordered by a department was paid for by that department out of its library allocation for a period of two years. Thereafter it was automatically transferred to G.P. In 1971 however, G.P. constituted 73,19% of the library materials budget, so no further journals were debited to it. Periodicals ordered in 1971 were in fact subsequently transferred to G.P., following a careful scrutiny of journals currently received and consequent cancellation of some of them. Post 1971 journals, however, continued to be paid for by the initiating department.

Thus when the formula currently in operation was determined, R149 025 was ignored. This figure represents the amount of G.P. that was used to pay for subscriptions which had been ordered by the teaching and research units. The balance, viz.

R26 972 was used for reference journals such as citation indices, abstracts and bibliographies, inter-faculty unit subscriptions and also included a small credit balance.

The distribution of the R149 025 amongst the faculties was as follows:

Faculty	Percentage
Arts	9,61
Commerce	1,93
Education	0,95
Engineering	7,65
Fine Art and Architecture	2,25
Law	2,78
Medicine	24,08
Music	0,71
Science	45,7
Social Science	4,34

Should the R138 929 allocated to the faculties, excluding the inter-faculty units, be added to the amount being spent out of G.P., the percentages per faculty alter significantly as seen in the following table:

Faculty	Percentage
Arts	19,72
Commerce	4,03
Education	1,55
Engineering	6,82
Fine Art and Architecture	3,42
Law	4,85
Medicine	21,17
Music	1,17
Science	31,84
Social Science	5,43

Let us contrast this with the percentages recommended by the Subcommittee of the Library Committee and note the discrepancies:

Faculty	Percentage
Arts	- 5,88
Commerce	- 3,97
Education	- 0,05
Engineering	- 0,88
Fine Art and Architecture	- 2,28
Law	- 2,75
Medicine	+ 1,77
Music	- 0,03
Science	+14,44
Social Science	- 0,17 ¹¹

Thus we see that all faculties with the exception of Medicine and Science are receiving percentages ranging from 0,03% to 5,88% less than those recommended by the Subcommittee. Medicine is receiving 1,77% more and Science 14,44%, which represents R41 568.

Using weighted student numbers as per the Commission's recommendations, the amount per student is shown below:

Faculty	Weighted student numbers	Amount received R	Amount per student R
Arts	2 086	56 793	27,23
Commerce	1 716	11 592	6,76
Education	528	4 464	8,45
Engineering	956	19 639	20,54
Fine Art & Architecture	674	9 857	14,62
Law	469	13 973	29,79
Medicine	1 789	60 970	34,08
Music	311	3 359	10,80
Science	1 674	91 672	54,76
Social Science	559	15 635	27,97

Since the Subcommittee's formula was provisionally adopted, periodicals ordered between 1972 and 1975 have been transferred to G.P. This has meant an increase of R22 877 to that fund in 1979. On analysing this recent transfer, the faculties received the following percentages:

¹¹ See Appendix 4

Faculty	Percentage
Arts	15,73
Commerce	5,74
Education	1,96
Engineering	13,23
Fine Art and Architecture	3,03
Law	9,59
Medicine	19,39
Music	0,36
Sc ience	25,96
Social Science	5,01

Totalling the 1978 and 1979 G.P. allocations, the current position is:

Faculty	Percentage
Arts	10,42
Commerce	2,44
Education	1,09
Engineering	8,39
Fine Art and Architecture	2,35
Law	3,69
Medicine	23,45
Music	0,67
Science	43,07
Social Science	4,43 ¹²

8.4.2. FORMULA VERSUS FACT

This transferral of subscriptions to G.P. has made the following adjustments to the percentages allocated to the faculties and consequently altered the percentage deviation between the Subcommittee's recommendations and actuality:

Faculty	% of total allocation	% deviation
Arts	19,43	- 6,17
Commerce	4,15	- 3,85
Education	1,58	- 0,02
Engineering	7,29	- 0,41

¹² See Appendix 5

Faculty	% of total allocation	% deviation
Fine Art and Architecture	3,39	- 2,31
Law	5,2	- 2,4
Medicine	21,04	+ 1,64
Music	1,11	- 0,09
Science	31,4	+14,0
Social Science	5,4	- 0,2

8.4.3. ALLOCATION PER STUDENT

Using weighted student numbers, the alteration to the amount per student is as follows:

Faculty	Weighted students	Amount received	Amount per student
Arts	2 086	R60 391	R28,95
Commerce	1 716	R12 905	R 7,52
Education	528	R 4 913	R 9,30
Engineering	956	R22 666	R23,71
Fine Art and Architecture	674	R10 550	R15,65
Law	469	R16 168	R34,47
Medicine	1 789	R65 405	R36,56
Music	311	R 3 441	R11,06
Science	1 674	R97 612	R58,31
Social Science	559	R16 780	R30,02

Another worthwhile comparison is against the state subsidy which is based on weighted student numbers. Keeping in mind the 12,06% reduction in state subsidy in 1978, and the further reduction imposed by the University Administration which amounted to 40,72%, the following faculties either received or failed to receive their quota:

Faculty	Subsidy	12,06% cut	40,72% cut	Amount received
	R	R	R	R
Arts	53	46,61	27,63	28,95

Faculty	Subsidy	12,06%	40,72%	Amount
		cut	cut	received
	R	R	R	R
Commerce	53	46,61	27,63	7,52
Education	53	46,61	27,63	9,29
Engineering	75	65,95	39,10	23,71
Fine Art and Architecture	53	46,61	27,63	15,65
Law	53	46,61	27,63	34,47
Medicine	89	78,27	46,40	36,56
Music	53	46,61	27,63	11,06
Science	75	65,95	39,10	58,31
Social Science	53	46,61	27,63	30,02

Thus it can be seen that the Faculties of Arts, by R1,32 per student, Law, by R6,84 per student, Science, by R19,21 per student and Social Science by R2,39 per student benefitted to the detriment of the other faculties, notably Commerce, Education and Music.

This is the current position at U.C.T. and it is in an endeavour to iron out the anomalies and ameliorate the inequities that this research has been undertaken.

SECTION 3 : EMPIRICAL SURVEY

CHAPTER 9

COMPARISON OF ELEVEN SOUTH AFRICAN UNIVERSITIES

9.1. EXPLANATION OF APPROACH

In an endeavour to ascertain policies and practices relating to the allocation of library material funds and acquisition-related activities, a questionnaire was drafted.¹³ This survey was restricted to the other South African universities which, as in the case of UCT, are subsidised according to the van Wyk de Vries formulae. The reasons for this were two-fold:

- (a) The state subsidy relating to library materials and its subsequent allocation or non-allocation to teaching units is an integral part of this study. It therefore seemed desirable to restrict the questionnaire to other institutions similarly funded, thus creating a valid basis for comparison.
- (b) The policies and practices found at other South African universities canvassed in the questionnaire would, by virtue of having been formulated and implemented, within the framework of the Commission's recommendations, have greater relevance to UCT than those in which there was no fundamental common denominator.

Thus may investigation was restricted to the following universities, in addition to UCT:

University of the Orange Free State;
University of Natal - Durban and Pietermaritzburg campuses;
University of Port Elizabeth;
Potchefstroom University for C.H.E.;
University of Pretoria;
Rand Afrikaans University;
Rhodes University;
University of Stellenbosch;
University of the Witwatersrand;
University of South Africa.

¹³ See Appendix 6

9.2. QUESTIONNAIRE TECHNIQUE

A copy of the questionnaire was posted to each South African university library involved in the survey. Enclosed was a covering letter indicating my intention of visiting each of them. Unfortunately circumstances did not permit my calling on the University of the Free State. I managed however to follow up my questionnaire with a personal visit in all other instances. These vis-a-vis discussions were of inestimable value as they:

- (a) Enabled me to clarify any points over which there might have been a misconception;
- (b) Not only elicited the responses to the specific questions posed, but at times provided a wider background to procedures and policies;
- (c) Encouraged the completion of the questionnaires within a reasonable time limit;
- (d) Contributed in no small measure to the gratifying responses received.

The questionnaire was designed to reveal information relevant to the subject of this research, viz., considerations that impinge upon the allocation of funds. Thus there is a correlation between the literature survey, which constitutes Section 1, and the questionnaire. In both, book selection policies and practices are discussed. So too are the questions of evaluation, the impact of periodicals in the library materials budget, resource-sharing and budgetary techniques. The variables incorporated into a formula or guidelines comprise an important aspect of the questionnaire.

In addition, advantage was taken of the opportunity to ascertain details relating to acquisition procedures, such as identification of booksellers most heavily used by South African university libraries; provision for General Sales Tax (G.S.T.) and surcharge; accession rates for various media, inclusive of interlibrary lending and finally plans regarding possible computerisation.

Although in several instances information was sought for

previous years, notably 1963; 1968 and 1973, not all libraries were able to provide these details. I have therefore, in the comparison of the university libraries, restricted it to 1978.

9.3. ANALYSIS OF FINDINGS

9.3.1. BUDGET APPROPRIATION

Unfortunately, the question relating to the library's percentage of the parent institution's total budget failed to distinguish between gross and nett budgets. Thus a combination of answers were received. The libraries were subsequently contacted and the relevant information has been inserted. However, as there is a combination of both gross and nett figures, it is impossible to make accurate comparisons. What follows is a table showing the average of the Commission's recommendations for the years 1970 - 1974 inclusive, which are nett figures, and the actual percentages received by each library.

University	Average Commission's percentage	Percentage received
Cape Town	7,4	3,84 gross 5,24 nett
Free State	6,3	3,88 gross
Natal - Durban		3,25
Natal - Pietermaritzburg	5,98	5,03 gross
Port Elizabeth	5,46	3,7 nett
Potchefstroom	6,5	Not available
Pretoria	7,45	4,96 gross
Rand Afrikaans	5,63	4,15 gross 7,1 nett
Rhodes	5,64	3,81 gross
Stellenbosch	7,34	3,05 gross
Witwatersrand	7,3	4,03 gross

With regard to actual rands and cents, Pretoria University library's budget, because of the high student enrollment which is in excess of 17 000 students, and the high ratio of post-graduate

students, receives well over R300 000 more than her nearest rival, viz. Stellenbosch. A comparison follows:

University	Amount received
Cape Town	R361 082
Free State	R409 255
Natal - Durban	R351 154
Pietermaritzburg	R176 991 ¹⁴
Port Elizabeth	R253 131
Potchefstroom	Not available
Pretoria	R904 000
Rand Afrikaans	R380 000
Rhodes	R134 600
Stellenbosch	R521 934
Witwatersrand	R449 926

Mention was made, when the Commission's recommendations with regard to staffing of libraries was discussed, that no provision was made for decentralised libraries, and the percentage of the library budget spent on personnel is reflected in the following table:

University	% spent on staff
Cape Town	61,75
Free State	43,43
Natal - Durban	52,5
- Pietermaritzburg	49,87
Port Elizabeth	43,0
Potchefstroom	Not available
Pretoria	+ 45,0
Rand Afrikaans	34,0
Rhodes	49,18
Stellenbosch	56,9
Witwatersrand	60,14
UNISA	34,0

¹⁴ This figure excludes audio-visual material, and although no amount was given for A/V material, 229 items of software were purchased as well as a Bell and Howell tape/slide machine and two Akai tape decks.

It was impossible to ascertain how much the university libraries had spent on G.S.T. and surcharge, as in a number of cases, where figures were available, they only related to foreign purchases. Rand Afrikaans University however, gave a figure of R29 000 with a 1978 monograph acquisition figure (exclusive of donations) of 6 579 volumes and 140 microform titles. Stellenbosch, with 10 281 monographs and 450 microform titles, spent R28 241 on overseas material only. However, 87,5% of their orders (books and periodicals) were routed to agents outside South Africa.

9.3.2. SELECTION POLICIES AND PROCEDURES

With regard to selection policies in general, only two university libraries have written statements. These are UNISA, who has written policies for all subjects collected, modelled on those in use at Stanford University, and the University of Natal, Durban campus, who has a detailed policy pertaining to the selection of publications, inclusive of retrospective and current materials, serials, government publications, photographs, reprints and manuscripts, together with subject fields and geographical localities in so far as the Killie Campbell Africana Library is concerned. At UNISA, the selection is currently done by thirteen subject reference librarians in close co-operation with the academics in line with the selection policy statements. At Killie Campbell, most of the selection is done by the library staff from antiquarian catalogues though occasional recommendations from the teaching and research staff are received. The method of selection at The University of Pretoria underwent a metamorphosis in 1975. Prior to that date, the selection was done by the academics. Since then however, twenty two subject librarians have been appointed, and they, in close liaison with the heads of the academic departments, are responsible for the balanced growth of the collections.

At two other universities, subject librarians play a role in selection but at the Rand Afrikaans University, although

they may initiate orders, they also act as co-ordinators in conjunction with the teaching staff in developing a balanced collection relevant to the teaching and research needs of the university. At Pietermaritzburg and at the University of the Orange Free State, the subject librarians tend to play a more subordinate role, and at Pietermaritzburg they supplement the selection done by the academics. In fact, provision is made for this in the budget, as each of them, and there are four at the moment, is given an allowance for this purpose.

At the Universities of the Witwatersrand, Potchefstroom, Natal, Durban campus, Rhodes, Stellenbosch and Cape Town, where there are no subject librarians to influence selection, the librarian or his deputy, retain the 'power of veto'.

The purchase of materials relevant to the teaching departments and research units tend to follow the same lines, though in the case of Durban, all recommendations from the teaching staff have to be assigned priority ratings by the recommending body and these are ordered accordingly. At the end of the year, all unprocessed recommendations are returned to the initiating departments for re-evaluation.

In the case of interdisciplinary material, the library staff play a more dominant role and take the initiative, though recommendations from the academics are in all cases considered. However, there are ground rules which influence selection. One of these is relevance to the teaching and research needs of the parent institution. Thus UNISA, Pretoria, Rand Afrikaans and Rhodes do not purchase Africana per se; and Potchefstroom only buys current material as far as funds permit. Neither Pretoria, Rand Afrikaans, Potchefstroom, Port Elizabeth, Rhodes nor Stellenbosch buy manuscripts and Pretoria does not subscribe to newspapers, unless these purchases are required by the curriculum.

With regard to expensive purchases, at Witwatersrand and Free State, expensive purchases must be authorised by the Executive Committee of the Library Committee twice yearly and the Library Committee respectively. At U.C.T., departments may apply to two special grants, primarily made available for expensive items or back runs of journals, and these applications are con-

sidered by a Sub-Committee of the Library Committee especially appointed for this purpose.

9.3.2.1. UNDERGRADUATE MATERIAL

Relating to the selection of undergraduate material, orders for books on recommended reading lists and basic texts are motivated by the academics, either directly or via inclusion in study guides.

At Pretoria, the library considers that basic texts should be bought by the students, and although the library may have one copy, it will not consider the purchase of duplicates as this will interfere with the lecturer's aim of enabling the students to build up their own collections.

The Rand Afrikaans University Library's definition of a basic text is if at least half of it will be used for formal study. These texts are found in the library but are generally the result of donations.

The other libraries tend to agree on the desirability of students purchasing their own texts, but no other library felt as strongly about it as Pretoria.

With regard to multiple copies, some of the universities, such as Witwatersrand, U.C.T., Pietermaritzburg and Pretoria have separate allocations earmarked for this purpose. Others, such as Rhodes, Stellenbosch and the Durban campus order duplicates from the relevant departmental accounts. Yet others, including UNISA and the University of Port Elizabeth use their General Fund.

Some of the universities use a formula when determining the number of multiple copies to purchase. At U.C.T., the ratio is 1 copy per 30 to 33 students; at Pietermaritzburg it is 1 : 50 students; UNISA monitors the demand via its computerised issue system and orders accordingly. Stellenbosch imposes a maximum of 6 copies, irrespective of the size of the class; U.P.E. has a limit of 5 copies and the Medical Library at the Durban campus does not buy in excess of 4 copies.

9.3.2.2. POSTGRADUATE MATERIAL

Research and postgraduate monographs are requested by the academic departments, except in the case of UNISA where the subject reference librarians are also involved, and Pretoria where, as a result of the University Librarian seeing all faculty minutes, he is able to extract the necessary information relating to new research programmes. This he passes on to the subject librarian concerned.

With regard to periodicals, whilst most libraries are guided by the teaching staff, U.P.E. does not subscribe to research journals but acquires the needed articles by means of photocopies. At Pretoria, a request for a new postgraduate oriented journal must be motivated. It is then checked in PISAL and locations determined. If available in South Africa, the recommendation is returned to the department for re-consideration, and if the department considers that it is essential to have it on campus, an appro copy is obtained. Following scrutiny, a year's subscription is placed and only then, a standing order, if it is warranted.

9.3.2.3. SPECIAL COLLECTIONS

The libraries were asked to identify subject areas in which their universities would be willing to become resource centres. As is known, the NLAC, with its limited funds, does subsidise mathematics collections at the Universities of the Witwatersrand, UNISA and the CSIR and education materials at the HSRC, Free State and Potchefstroom universities. Dr. S. Malan explained in an interview on the 21st May, 1979 that the choice of these two disciplines was based on the fact that of all the sciences, Mathematics was the only one that had been properly investigated. Education, on the other hand, had been selected as it had the widest or broadest application among the human sciences. Dr. Malan said that the NLAC require a co-operating library to provide not only the basic stock from its own funds, but also specialised material in particular areas. The money received from the NLAC is designated for the purchase of the more esoteric research materials.

The libraries, whilst willing to co-operate were in some instances reluctant to lend material from some of their special collections. They would however welcome researchers to their institutions in order for them to use the material in situ.

At UNISA, there are comprehensive collections in all fields taught at the University, with particular strengths in classics, theology, semantics and law.

Pretoria, by virtue of its relationship with Onderstepoort, specialises in veterinary science, and in fact runs a Selective Dissemination of Information service (SDI) for veterinary surgeons. In addition, they collect sheet music, be it classical or popular, written by all South African musicians, and have depth and breadth in their holdings of Chromatography, Papyrology, Philology as well as a Goethe collection.

The University of Witwatersrand specialities include Africana and Rare book collections, Hebraica and Judaica, which had its origins as the private collection of the late Dr. Landau which was bequeathed to the university; material on the Church of the Province and historical papers.

Although RAU is only twelve years old, it has developed good coverage in the fields of education, library, information and computer sciences, philosophy and emitic languages. There is also a possibility that American Studies or Sovietology may develop into strong collections.

Potchefstroom University has the Ossewa Brandwag manuscripts; the Albert Hertzog Law collection; the Postma Collection, which is strong in Greek and Latin; an AfricanaCollection; the archives of the Reformed Church of South Africa as well as a Theological Collection.

Free State collects material related to educational planning.

The Durban campus of the University of Natal has an excellent Africana collection housed in the Killie Campbell Library; early or significant works illustrative of the history of science and technology; the Powell Cancer Collection at the Medical Library and the three branch libraries of Music, Architecture

and Law have good coverage in their respective fields.

Pietermaritzburg houses the Cathedral Collection whose title-page catalogue has just been bound in four volumes and reproduced on microfiche.

UPE concentrates on the Anglo Boer War, whilst Rhodes, being an older university, has built up stock on Southern Africa with special reference to the Eastern Cape; music in the Kirby Collection; 1a in the Gutche Collection; African languages, Zoology and Ichthyology.

Stellenbosch, by having Departments of Agriculture and Forestry have stock in these areas which is not available elsewhere in the Western Cape; the Africana Collection at the university is significant because of its quality rather than its quantity and included in it is the Solomon Collection of maps. The Scott Collection, which consists of 30 000 books and 10 000 gramophone records, strengthened their music, English literature and art collections in particular.

At UCT, the Africana Collection is developing dramatically with its exchange agreements, as well as recurrent funding made available by courtesy of the Chancellor of the University. In addition, the Bleek Collection on African languages; the Rare book; Kipling; Crawford (Mathematics); and Cultural History of Western Europe collections are significant. The Willis Naval and Aeronautical and Mossop Chinese Collections, though small, contain valuable and rare material. Government publications, manuscripts, which include, inter alia, the Duncan and Stanford papers, and the Goldsmith Kress Economic Library on microfilm are also noteworthy.

9.3.2.4. EVALUATION

Six university libraries do not evaluate their holdings; lack of time and experienced personnel being the main reasons. At three universities, evaluation tends to be an ad hoc exercise, prompted either by the need to appraise the strength of stock to accommodate a new research programme, or the appointment

of a new professor, who, as a result of his evaluation, may wish to motivate his application for additional funding.

At UNISA however, evaluation is an on-going process resulting from the monitoring of interlibrary loan requests and the checking of bibliographies against holdings.

At Pretoria, evaluation is part of each subject librarian's portfolio and constitutes an integral part of his/her annual report which is submitted to the Director of Library Services, who retains some money for the express purpose of building up weak collections.

The Durban campus have responded to the Inter-University Library Committee of the Committee of University Principals which has urged co-operation with regard to periodical subscriptions being promoted on a regional basis. Thus, with a view to rationalising subscriptions, Durban has launched an evaluation of science and engineering journals, which has already resulted in the cancellation of twenty six subscriptions. A similar survey is currently being undertaken for Arts, Architecture and allied disciplines, Commerce, Law, Social Science and Music.

The libraries were generally in accord with the desirability of regular evaluation. The Stellenbosch statement puts it succinctly: "[It] should be a by-product of regular activities and procedures while serving users and probing their requirements." Some felt the need to involve the teaching staff who were not always available, hence evaluation became a somewhat haphazard exercise. Others considered it to be the responsibility of the library, and whilst one library queried whether, from the staff time involved, evaluation and subsequent weeding was a financial proposition, another library, who currently does not weed, felt that it would become an obligatory exercise as a result of financial necessity. However, it would appear as though some degree of evaluation will be compulsory as a result of the implementation of South African Post Secondary Education (SAPSE) in 1980.

9.3.2.5. WEEDING

Five universities do not have a systematic weeding policy, although Pretoria will be doing it next year once they are computerised, as weeding costs as much as cataloguing.

RAU are considering the pros and cons of doing it either bibliometrically or via the computer.

Four universities do a limited amount. UNISA weed their study collection as well as relegating superseded editions to store. They are however, undertaking investigations as they consider weeding to be necessary. Durban and UPE weed superseded editions and Pietermaritzburg does it on an ad hoc basis. At the University of the Witwatersrand, weeding is an on-going process facilitated by having a computerised catalogue.

In the case of periodicals, weeded stock is given to interested libraries by the University of the Witwatersrand.

At Stellenbosch, weeding is done systematically by the Reference Librarian, under the supervision of the University Librarian or his deputy.

The library retains the right not to order particular items recommended by the teaching staff which may be regarded as unsuitable at UNISA, Pretoria, Witwatersrand, RAU, Potchefstroom, Durban, UPE, Stellenbosch, Pietermaritzburg and UCT, though the authority is never used in the latter two cases. Rhodes prefers the use of persuasive tactics. Free State library is not empowered to refuse orders initiated by the teaching staff, except in so far as unwarranted duplication is concerned. Only in the case of RAU is the department not notified of a recommendation that has not been processed, though the response to the question elicited the proviso "not formally".

Imbalances or deficiencies in the collection are remedied by subject librarians where these are on the staff as at UNISA, Pretoria, RAU and Pietermaritzburg; by members of the library staff at Potchefstroom or by consultation with members of the teaching staff as at Stellenbosch, Rhodes and Free State, or by altering departmental allocations as at Witwatersrand.

9.3.2.6. ROLE OF SUBJECT LIBRARIANS

The roles played by subject librarians, in addition to selection, vary from institution to institution. At UNISA,

where they are called subject reference librarians, they also work in close liaison with the relevant academic departments, and provide reference services to postgraduates and teaching staff.

At Pretoria, they run a SDI service for postgraduate students and academics, and a reference service for the library's users. In addition, they compile bibliographies and as mentioned earlier, they have to evaluate and maintain their subject collections.

At RAU, the subject librarians are in full charge of their respective sections, doing their own classification, cataloguing and subject headings as well as any clerical work which may arise.

At Free State, they help both students and lecturers in literature searches.

At Pietermaritzburg, although they only supplement the selection done by the teaching staff, they refer items of interest to the academics for consideration. They also deal with reference queries, select donations relating to their subject areas, and catalogue them in addition to the purchases. In addition, each one has a task of a more general nature, such as keeping au fait and acting as library liaison with regard to computerisation; dealing with all audio-visual material, etc.

The Durban campus intimated that they hope to engage subject librarians in the foreseeable future.

The qualifications required by subject librarians included not only academic degrees ranging from Bachelors to Doctorates (RAU in fact currently has two subject librarians with PhD's), but emphasis was placed on the need for professional library qualifications. In one instance it was affirmed that higher library qualifications were a greater recommendation than subject specialisation in another sphere.

The range of subjects assigned to the subject librarians tend to be somewhat arbitrary, and dependent on work load, though there is a desire to relate the subject areas more rationally. At RAU, however, the distribution is according to "leergang groepe" which also operate between the departments and Senate, and at Free State, the subjects are divided according to faculties.

In no case does the employment of subject librarians drastically alter the financial ratio between staff and library materials as recommended by the van Wyk de Vries Commission in their samples. (de Vries, 1974:369-377). These range from between c.55 - 61,25% for staff as opposed to c.45 - 38,75% for library materials.

An observation on the employment of subject librarians has been made by Thompson. He reports that the salaries budget at the University of East Anglia Library constitutes only 40% of the total library expenditure, due to the appointment of subject specialists, in contrast to 50% which is the more usual figure found in British universities. (Thomson, 1979:114).

A similar position pertains in South Africa where the libraries which employ subject librarians tend to spend less on staff than those which do not, e.g. neither UCT, Witwatersrand nor Stellenbosch have subject librarians, yet the percentage of the library budget spent on staff is 61,75%; 60,14%; and 56,9% respectively. In their defence however, it must be pointed out that all three universities have decentralised systems, and therefore not only stock but services have to be replicated.

Subject librarians at Pietermaritzburg, Free State and RAU report directly to the University Librarian or his deputy. At UNISA, an Assistant Director is in charge and at Pretoria, where they are accorded a great measure of professional responsibility, they elect their own leader on an annual basis who then reports to the Director of Library Services. It is the intention, however, to appoint a Deputy Director - Subject Librarian Services in the near future.

The criteria governing format employed by the subject librarians in selection reflect the current financial climate. The availability of funds is a major consideration and mention was made of the need to know resources in the locality as library co-operation could save unnecessary duplication. The other main factors included demand and availability of material and its relevance to courses taught, within the ambit of the selection policy, where one exists.

User resistance to microform is still evident and the preference is for printed matter if available at a reasonable price.

In the case of rare, expensive, little-used and/or bulky material, UNISA, Pretoria, Potchefstroom, UPE, UCT and RAU and Durban prefer microform, particularly if the material is unlikely to be heavily used. Pietermaritzburg, Free State, Witwatersrand and Stellenbosch opt for the printed material, whilst Rhodes indicated that the format is of no consequence. All universities showed a preference for hard copy when it came to monographs and current subscriptions, though UPE may buy out-of-print titles on microfilm is not available in paper.

In the case of back issues of journals, the Library Committee at UCT has passed a decision which makes it imperative to purchase back numbers in microform if at all available.

Stellenbosch buy microform for long runs only; UPE for out of print ones only and Witwatersrand are restricted to microfiche as opposed to microfilm because of a shortage of microfilm readers.

Pretoria seldom buy back runs and UNISA and RAU only acquire them if they are needed repeatedly and not available in South Africa.

Durban tend to buy microcopies but demand, cost and volume are determining factors. This is also the position at the other universities with the exception of Free State who prefer hard copy.

Pretoria, Witwatersrand, Pietermaritzburg, UPE and UNISA seldom purchase antiquarian material. RAU and Potchefstroom fill gaps in their collections from antiquarian sources and the format is not a major consideration. Free State, Durban, Stellenbosch and UCT prefer hard copy if available at a reasonable price; whilst at Rhodes, the type of antiquarian material is the deciding factor.

9.3.2.7. DISTRIBUTION OF ORDERS

All the libraries, with the exception of Pretoria, Free State and UCT use agents in countries of origin. The South African book trade is supported by all the university libraries to varying degrees as will be seen further on where the percentage of orders routed overseas is given. The only libraries not to have favoured agents irrespective of the country of origin are Stellen-

bosch, UPE and Witwatersrand. Universitas is used by all the universities either for books or journals or both and supplies material from throughout the world. Van Schaik, Exclusive and Nasboek are the next most heavily used South African agents. Blackwells in Oxford followed by John Smith supply most of the orders directed to the United Kingdom whilst Blackwells North America with International Book and Report Services a poor second cater for most of the American market in cases where American publications are not bought via local agents. Blackwells have the edge on all other overseas periodical agents, though Swets, Harrassowitz, Nijhoff, Ebsco, Faxon and Bailey are also used.

The percentage of orders routed overseas ranges from a modest 3 - 5% by Free State to 87,5% (monographs and periodicals included) by Stellenbosch. RAU only sends about 12,5%; Pretoria about 25%; UNISA 33%; UPE about 40%, Potchefstroom about 45%; Rhodes 46%; Durban, inclusive of the branches, 51% and UCT 55,12%. Witwatersrand send 57% overseas and Pietermaritzburg about 80%.

9.3.3. ALLOCATION OF LIBRARY MATERIALS BUDGET

Although all the libraries allocate funds either to departments or faculties, UNISA does it internally and thus departments are not aware of their allocations. To quote the University Librarian, "The library has a free hand to allocate resources as they seem fit. Thus a new department will get extra funds; funds can be transferred from one department to another, etc." In this respect UNISA is unique.

Although the libraries may use different combinations of variables when allocating the library materials budget, each and every one of them, with the sole exception of UCT, review the allocations annually. This is in fact the sole criterion used in the distribution at Durban, Potchefstroom, Stellenbosch and Rhodes. UNISA, Pretoria, RAU, Witwatersrand and UPE combine it with provision of being able to respond to recommendations by teaching or research units, and in the case of UNISA, Pretoria

and RAU, by ad hoc arrangements as well. Pietermaritzburg currently has, in addition to an annual review, a fixed formula, which is sometimes modified by ad hoc arrangements, and as the University Librarian said "intuition and experience;" Free State employ all four criteria listed in the questionnaire, viz., a fixed formula, annual review, provision for responding to recommendations and ad hoc arrangements. UCT however have introduced a fixed formula, which, as intimated in an earlier chapter, has not met with universal approval. However, a Sub-Committee of the Library Committee has been set up to study yet further the whole question of allocation, thus leaving the door open for modifications.

UCT is also unique in so far as the allocation in all other cases is made to the departments. At UCT, it is made to the faculties, who then inform the library of how it is to be sub-divided amongst their departments. The only other partial exception is at Free State, where grants are made to the departments apart from the three Faculties of Law, Medicine and Agriculture.

The responsibility for allocation rests solely with the University Librarian at UNISA and with the Director of Library Services at Pretoria. At RAU and Rhodes, although the University Librarian is primarily responsible, the Library Committee may suggest possible adjustments and their agreement is sought. At all the other universities, the responsibility is shared jointly by the University Librarian and the Library Committee.

9.3.3.1. FACTORS GOVERNING ALLOCATION

These factors that the different libraries take into account when allocating funds to the departments or faculties have been tabulated, but this should be looked at in conjunction with the following text as it was not possible to incorporate the different interpretations sometimes applied into the table.¹⁵

The factors which influence allocation vary from one uni-

¹⁵ See Appendix 7

versity to another, but some are fairly generally considered. The average price of books is taken into account at all universities, with the exception of Durban, though at Stellenbosch it is gauged on an intuitive basis only, and the average price of journals by Free State, Potchefstroom, UPE, Rhodes, Witwatersrand and UCT. Pietermaritzburg use it in calculating their journal allocation. The range, scope and level of courses feature in the calculations at UNISA, Pretoria, Witwatersrand, RAU (where research intensity is not actually quantified), Free State, Rhodes and Stellenbosch. UNISA, Pretoria, Witwatersrand, RAU and Stellenbosch are influenced by the proximity of other libraries. Here again, Stellenbosch assess this factor intuitively, as they do with monograph and journal title range, which also play a role at UNISA and RAU. Witwatersrand and UCT take into account monograph range only, whilst Pietermaritzburg use book title range for the book allocation and journal title range for their journal allocation. Four universities, viz., UNISA, Pretoria, RAU and Free State take cognisance of journals which are paid out of a consolidated fund; UNISA assesses bequests, both recurrent and ad hoc, whilst Pretoria only takes ad hoc bequests into account. Circulation statistics are used by UNISA, RAU and Free State; undifferentiated student enrollment by Potchefstroom and student and staff numbers by Free State and Stellenbosch, both undifferentiated. Witwatersrand however use differentiated student and staff enrollment. UCT, Pietermaritzburg and Rhodes (according to the van Wyk de Vries scales) are influenced in their allocation by differentiated student enrollment and Rhodes by undifferentiated staff, whilst Durban by differentiated staff enrollment, the latter in so far as an additional grant is accorded for each additional full professor in a department. Pietermaritzburg use undifferentiated staff numbers in calculating their journal budget.

Reader needs are calculated at UNISA by a study of previous ordering history, by demand and by the subjective opinion of the subject reference librarians; at Pretoria; at RAU by user statistics and observations by the subject librarians and at UCT, where they are quantified as the result of the collective sub-

jective assessment on the part of members of the Sub-Committee allied to range of monograph titles taken from BNB. At Witwatersrand, each department must motivate its application for funds each year and this, together with the amount of money spent in the previous year are major factors. RAU also require departments to motivate their funding every five to six years. They are asked to budget for current needs, retrospective materials and any special concessions they deem necessary. Rhodes adds one other factor to their calculations, viz. post-graduate successes.

As only three universities employ formulae, some elaboration on their mode of functioning is appropriate. Reference has already been made to the system operational at UCT.

Pietermaritzburg's current arrangement involves two budgets per department, one for monographs and one for journals. In ascertaining the book allocation, the three variables used include differentiated student numbers, average price based on British prices and title range. The factors making up the journal formula include average price, title range and undifferentiated staff numbers. These formulae are used as guides, as no department receives less than R800 and in so far as the journal allocation is concerned, should the formula not meet the committed needs of a department, the allocation is raised and should it prove to be in excess, it is reduced to within about R200 more than the amount committed.

At the University of the Free State, funds are allocated on a fixed formula basis by which every department as well as the three faculties of Law, Medicine and Agriculture are awarded a certain number of points, determined by student and staff numbers (undifferentiated), circulation statistics, average price of books and journals, range, scope and level of courses and periodicals which are paid for out of a consolidated fund. These allocations are revised annually in the light of the previous year's spending. In the case of a department having extraordinary needs, an ad hoc grant is made if circumstances permit.

Although the response to the question as to whether the University Librarian retains a fixed percentage of the library materials budget for use at his or her discretion elicited three "no's", these need amplification. In the case of UPE, they have a General Fund, which in fact constituted 23,42% of the library materials budget in 1978, and this amount, which may vary and is therefore not a fixed percentage, is not only used for the purchase of Africana, general indices and bibliographies, duplication, etc., but leaves the Librarian with sufficient resources which he can then use at his discretion, such as assisting departments in temporary financial straits; strengthening weak subject areas, etc.

Another negative response came from Potchefstroom, but with the rider: "Die Universiteitsbibliotekaris beskik oor ALLE fondse", the effect of which corresponds to the position at both UNISA and Pretoria, who answered in the affirmative, but inserted the figure of 100%.

The third "no" comes from UCT, where the funds that are under the control of the University Librarian are in fact earmarked for specific purposes, such as replacements, reference works, exchanges, non-book material, staff professional works, etc. Thus UCT is in fact the only university library where no provision is made in the budget for an amount to be left uncommitted which will provide some flexibility.

Among the other libraries, the amount over which the Librarian retains control is usually determined annually and varies from about R17 000 to R57 000. This money tends not to be allocated for specific purposes as in the case of UCT, but is used for reference material, replacements, duplication (except in the case of Witwatersrand and Pietermaritzburg, which like UCT, have a multiple copy fund); collection building, and helping departments whose funds may be depleted.

9.3.3.2. FEASIBILITY OF FORMULA AND/OR GUIDELINES

Only two libraries gave a qualified "yes" to the question of whether a fixed basis for the equitable distribution of library

funds was feasible. The advantages were basically administrative : it facilitated the distribution of funds and protected the Librarian from possible harassment from the teaching staff. The disadvantages far outweighed the above considerations. Some of the replies received follow:

"A more dynamic method of distribution is preferred. A fixed formula may cause rigidity in the system" (Free State).

"In practice flexibility is the key-word here and the rigidity of a fixed basis is counter productive." (Stellenbosch).

"From experience and observation it is impossible to devise a formula which will be effective for more than a limited period. Intuitive factor is a vital aspect. Allocation should be done by discussion." (Rhodes).

"We have launched an in-depth investigation into the feasibility of the different methods of allocating funds to academic departments and have come to the conclusion that it is impossible to find a 'correct' solution as it depends on the extent to which an allocation satisfies a department whether the formula applied to reach that allocation is regarded as suitable/acceptable. Any decision in this matter is too politically coloured to be acceptable to all." (Durban).

It is interesting to note that at Durban the book funds are divided equally among the 43 departments, with an additional amount, determined annually, for each additional full professor.

"I know of no formula that does not have a subjective element in it, whether it is weighting of students, weighting of 'library needs', etc. Multiplying a number of subjective factors and processing these statistically may pacify certain departments and be a politically expedient way of achieving it, but in the end, is as subjective as our seemingly haphazard way of doing things." (UNISA)

Only two universities however felt that it is not possible to establish realistic guidelines on which to base a sound distribution policy. Rhodes re-iterated the need for discussion and Free State considered that the establishment of new research units or teaching departments with extensive financial demands after the distribution of funds, would militate against the

feasibility of establishing guidelines.

Among those who felt guidelines could be laid down were RAU, Stellenbosch, UPE and Pietermaritzburg, to quote but a few.

"A statement of user needs by the department or research unit in collaboration with the subject librarian every 5 - 6 years does not burden the teaching staff too severely, and it gives a relatively clear picture of true user needs. If these are in excess of the available funds, they are cut pro rata, and the Librarian's fund can help hard-line cases." (RAU)

"With emphasis on realistic and the need for inspired innovation in flexibility." (Stellenbosch).

"We basically work on the following principles:
1. Amount spent on books and journals during the previous year; 2. Amount for books still on order; 3. Amount for orders which still have to be processed; 4. We try to distribute any increase in the book budget evenly among the various departments." (UPE).

"Yes, as a guide to distribution. Librarian should know about specific needs and biases within the university and apply intuition to modify formula." (Pietermaritzburg).

9.3.4. JOURNAL SUBSCRIPTIONS

Five universities, viz., UNISA, Pretoria, Witwatersrand, Durban and Stellenbosch do not include current journal subscriptions in the departmental allocations as all five have a consolidated periodical fund which constitutes about 20%; 54%; 51%; 43,4% and 64,78% of their respective library materials budgets. Both UCT and RAU permit departments to spend their allocations either on monographs or journals, though at RAU the departmental subscriptions, provided they are motivated, are transferred to the consolidated fund after twelve months. A somewhat similar arrangement existed at UCT, although departments had to carry their subscriptions for two years. This practice ceased in 1971 due to excessive pressure on the consolidated fund, but subsequently, as extra recurrent money became available, journals ordered up to 1975 have been transferred. RAU's commitment

to journals is in the vicinity of 55 - 60% and at UCT the percentage is 57,1%, which includes not only the consolidated fund but also those paid for out of departmental allocations.

Pietermaritzburg, as mentioned earlier, currently runs two budgets for each department with only bibliographies, abstracts and indices coming out of a consolidated fund. Potchefstroom, Free State, Rhodes and UPE, the latter also with a consolidated fund covering only indices and bibliographies, do not have general periodical funds, and all subscriptions are paid for by the departments. Only two libraries place a ceiling on the percentage that may be used on journals, they are UPE and Pietermaritzburg, as any deficit in the journal budget, in the case of the latter, is deducted from the book vote, whereas overspending on the book vote is carried forward.

Cancellation is not lightly undertaken at any university, but if it becomes compulsory, the authorisation comes from the University Librarian in the case of Pretoria, Potchefstroom, Stellenbosch and UNISA. At Rhodes, the initiative usually comes from the library and although the same may be said for UCT, UPE, Pietermaritzburg and Witwatersrand, the academic department which initiated the order must also authorise its cancellation. At Free State, Durban and RAU, cancellations are referred to the Library Committee.

9.3.5. RECURRENT FUNDING

The academic units at UCT, Pietermaritzburg, Witwatersrand, Pretoria, Rhodes and Stellenbosch are permitted to accrue unspent balances of their allocations from one year to the next. At Pietermaritzburg however, the amount carried forward may not exceed about three quarters of their annual grant and at Stellenbosch, the right of forfeit is reserved. The departments at UPE, Potchefstroom, RAU, Free State and Durban forfeit any credit balances that they may have at the end of each financial year. At UNISA, as the allocations are made internally and known only to members of the library and Library Committee, funds can be transferred from one to another as needed.

With the obvious exception of UNISA, all university libraries keep the departments informed of the state of their finances. RAU does it weekly towards the end of the financial year but otherwise on a monthly basis. Pietermaritzburg does it fortnightly for books and annually for journals. UPE does it monthly as does Pretoria. Stellenbosch, UCT, Witwatersrand, Free State and Rhodes send out statements at quarterly intervals, whereas Durban and Potchefstroom do it annually.

The amount of detail varies. The balance available to each department obviously features on every statement and in fact is the only information provided by Free State and Durban. Stellenbosch, Rhodes, Potchefstroom and UCT add the books on order figure and in the case of Rhodes, Potchefstroom and UCT, unpaid journal subscriptions. In addition, Potchefstroom quotes the total grant made to the department. Pietermaritzburg gives the books on order figure together with a print out of the books received, estimated price, actual price, difference between the two, order number and vendor. Detailed information is also supplied by RAU. UPE also supply a list of the books that have been supplied by the vendors and insert the annual periodical expenditure as opposed to Rhodes, Potchefstroom and UCT who give the unpaid portion at the time the statements are sent out. Witwatersrand statements include the amount of money committed for books that have been ordered, the amount that was available as at the 1st January and the amount that has actually been spent, i.e. invoices that have been paid. Finally, Pretoria supplies not only the books on order figure, which includes the number of items ordered together with the individual amounts, but also the recommended orders still on hand as supplied not only by the departments but also by the subject librarians, and the number of items received.

9.3.6. AD HOC FUNDING

The only university library which does not receive additional funding is UPE.

The way this money is spent may be stipulated by the sponsor and is obviously used accordingly, but otherwise it is generally

made available to the teaching departments. This may be done by application, as in the case of Witwatersrand, Free State, Rhodes, and UCT, in which instances the applications are considered either by the University Librarian or by the Library Committee. Alternatively, it may be allocated on an ad hoc basis to meet a specific need. Stellenbosch, Pretoria, RAU and Durban receive grants from the CSIR or HSRC; Witwatersrand, Pretoria, Free State and Durban are partially financed by their respective provincial administrations. Stellenbosch and UCT receive grants from other institutions and bequests are received by Stellenbosch, Pietermaritzburg, Witwatersrand, Durban, Rhodes and UCT. Pietermaritzburg, UNISA, Pretoria, RAU, Durban and UCT are assisted by subventions from their respective University Councils; and NLAC subsidies are given to Potchefstroom, Witwatersrand, UNISA, RAU and Free State. Money from professional associations is also received by Pietermaritzburg, Witwatersrand, Pretoria, RAU, Free State, Durban and UCT.

Money for new appointees to the teaching staff or promotion of existing staff for the purchase of books in their particular specialities, known as 'launching grants' at UCT, are made by Stellenbosch, Pietermaritzburg, Durban, RAU and UCT, but in the case of Stellenbosch, Pietermaritzburg and Durban the money is not provided by the library. The two Natal campuses award R1 000 to a new head of a department, whereas at UCT, senior lecturers receive R200, Associate Professors R250 and Professors R300. In all cases, the material bought with this money belongs to the library.

Newly created teaching or research units receive funds at most of the universities. Provision is either made in the budget or alternatively by ad hoc arrangements in response to an application and consideration by the University Librarian and/or Library Committee.

9.3.7. TAXES, SURCHARGES AND DISCOUNTS

Only UPE do not record an estimate for each order, and the

University of the Witwatersrand, UNISA and UCT record one for the entire order as well. Provision for G.S.T. and surcharge are made by Witwatersrand, UNISA, Free State, Durban, Rhodes and UCT, and Stellenbosch, Pietermaritzburg, RAU and Durban also allow for inflation. Two methods are used; either the price is loaded by 10 - 20%, or a separate account is opened to which G.S.T. and/or surcharge are debited.

All university libraries with the exception of Potchefstroom enjoy the same discounts, viz., British published price, and less 10% for other overseas and South African publications off the retail price. Obviously G.S.T. and surcharge (where applicable) are additional.

9.3.8. ACQUISITION FIGURES

It is impossible to do a detailed comparison of acquisition figures as a number of libraries do not distinguish between purchases and donations, or only have figures for the main library, excluding branches, or are unsure of the number of microform titles purchased, or have no records for some formats. Points of interest that can be gleaned from the returns indicate that the acquisition figure for monographs was lower in 1978 than in 1973 for Stellenbosch, UCT, Rhodes, UPE, RAU, Witwatersrand and Pretoria. Other factors that emerged included:

- (a) UNISA's purchases of books more than quadrupled that of the next highest;
- (b) UCT subscribes to more periodicals than any other university canvassed, 7431 in 1978, with Stellenbosch as runner up, with 7179 currently received journal titles;
- (c) UNISA's interlibrary loans department, whilst borrowing the most items, viz. 7079 and 5997 photocopies, also lent the most items and photocopies. The respective figures were 10 738 and 5636, though Stellenbosch supplied 5788 photocopies but only 5795 items.

9.3.9. ACQUISITION PROCEDURES

All Acquisition Departments, with the exception of RAU, request full bibliographical details for recommended purchases. RAU,

Pietermaritzburg and Potchefstroom will however accept blurbs or publishers' catalogues in lieu of order forms or cards, if available. Neither RAU nor Free State search for missing bibliographical details.

Three libraries, viz., UNISA, RAU and Pretoria, the latter on a limited scale, run appro plans for interested departments. All libraries keep a running balance of each account administered, either by computer print out or manually. UPE use the order slips on which the estimated price or price taken from a bibliography or catalogue is also typed. On receipt of the book, the estimated price is replaced by the invoice price and as this is a daily routine, the acquisitions department knows instantly what balance there is in each department.

Five libraries do not have a specific fund for multi-disciplinary works, and in cases where one exists, the University Librarian, Library Committee, Reference Librarian, Acquisitions Librarian or subject reference librarians may authorise purchases depending on the institution. In instances where there is not a multi-disciplinary fund, departments may be allowed to share the cost of publications, but the practice is either discouraged or a minimum amount per department limits the number of requests.

The final question related to computerisation. Pietermaritzburg and RAU already have computerised Acquisition Departments. Pretoria plans to instal DOBIS at the end of this year. UNISA's system is still on the drawing board and Stellenbosch and UCT are currently investigating the whole question. Witwatersrand, UPE, Durban, Potchefstroom and Free State hope to computerise, but Rhodes does not have any immediate plans. Once a national network is in operation, she will do the minimum necessary to co-operate with other libraries.

SECTION 4 : SUMMARY OF FINDINGS

CHAPTER 10

CONCLUSIONS

In this section it will be endeavoured to correlate the findings of the literature survey, be there a consensus of opinion or otherwise, with the position that pertains at South African universities involved in the questionnaire, and with special reference to UCT. The implications of some of the budgetary techniques described in the literature will however be confined to the UCT situation.

10.1. COLLECTION DEVELOPMENT

There is unanimity in the literature concerning not only the desirability but the necessity of each library having a collection development policy statement. The major reasons supporting the need for a collection development policy statement can be summarised to include:

- (a) The need to ensure that the collection is relevant to and supportive of the teaching and research carried on within each institution, thus fulfilling the most fundamental *raison d'être* of a university;
- (b) The formulation of both long and short term planning, and concomitantly, the most advantageous use of the library materials budget;
- (c) Provision of detailed guidelines for book, journal, micromedia and audio-visual selection within each subject area in which the library is to collect;
- (d) Contribution to library co-operation by making known the areas in which collections are to be developed either comprehensively or eclectically.

Not only are there no dissenting voices in the literature regarding the advantages of collection development policy statements, but there is also agreement that the onus for the compilation of these statements rests with the library.

According to the responses received to the questionnaire, the only South African university which has a comprehensive col-

lection development statement is UNISA. This they have adapted from one used at Stanford University. The Durban campus of the University of Natal has a written policy statement for its Killie Campbell Africana Library, which comprises a highly specialised collection, but not for its other subject areas. At the other universities at which subject librarians are involved in selection, or where selection is done by the teaching staff, some general criteria, such as relevance to the teaching and research programmes, are employed, but none of them has a written collection policy.

10.2. SELECTION OF LIBRARY MATERIALS

It was noted that there are three methods of selection currently in vogue. The erstwhile traditional Anglo-American approach left selection solely to the teaching staff. This method is losing support because:

- (a) It has resulted in haphazard and unco-ordinated purchases;
- (b) It has resulted in some members of the teaching staff confining the selection of materials to their own specialities, which, as a consequence of the knowledge explosion, are becoming increasingly narrow;
- (c) The teaching staff themselves do not have the necessary time to undertake a comprehensive review of the literature.

As was noted by Danton, one of the criticisms levelled at the early twentieth-century Referenten of German university libraries was the fact that they could only spend about twenty hours per week on selection, and this was found to be insufficient. (Danton, 1963:37-42).

The second system entrusts selection of all library materials to subject specialists or area specialists. Examples of this are seen at the New York Public Library and in the German Referenten. Advocates of this approach invariably quote the findings of the Waples and Lasswell study in which the New York Public Library's holdings of social science materials was found to be superior to

that of a number of major American university research libraries where selection at this stage was done by the teaching staff. (Waples, 1936:71).

The third method is the one which is gaining increasing support. This is a joint endeavour involving the teaching staff who, with their specialised knowledge, play an invaluable role particularly in the acquisition of advanced research material, and the librarians. In the case of the latter, their responsibility is not restricted to a single discipline, and can therefore be more objective. In addition, they have the review literature at hand and receive greater feedback from the library's users.

The appointment of subject specialists or subject librarians is now found at a number of South African universities which, as revealed during the survey, include UNISA, Pretoria, RAU, Free State and Pietermaritzburg. Durban reported that they are planning to create such posts in the near future.

The roles of South African subject reference librarians however differ. At UNISA, Pretoria and RAU, whilst accepting and encouraging recommendations from the teaching staff, they tend to take the initiative. At Pietermaritzburg, they supplement the selection by the academics. At Free State, they refer items of potential interest to the teaching staff. At the remaining universities, where subject librarians have not yet been appointed, the traditional Anglo-American approach prevails, and library participation is limited to general reference material, duplicates and additions to some specialised collections.

With regard to academic qualifications of subject librarians, RAU tends to model itself on the German system, laying great emphasis on advanced degrees in subject fields other than librarianship. Currently, two of their subject librarians have Ph.D's in the relevant disciplines in which they are responsible for selection. The other universities consider higher library qualifications to be of greater advantage than those in a single extra professional discipline, and thus align themselves with Downs' and Messick's specifications. (Downs, 1963:4-8; Messick, 1977:368-74).

There is no consensus regarding either the duties (over and above selection and involvement in the compilation of collection development policy statements) or location within the organisational structure of subject librarians in the literature. Gration and Young, as well as Sandhu, place them in reader services. (Gration, 1974:28-34; Sandhu, 1975:64-67). Messick however advocates their administrative independence, particularly in moderately sized libraries, where the chances of their being used as staff reliefs are aggravated should they be attached either to reader or to technical services. (Messick, 1977:368-74).

Although the South African universities who employ subject librarians have not made them subordinate to the head of reader services, their duties are more allied to this sphere than that of technical services, with the exception of RAU. At UNISA, the subject reference librarians are directly responsible to an Assistant Director. Pretoria intends to appoint a Deputy Director - Subject Librarian Services in the near future. At Pietermaritzburg, Free State and RAU they are directly responsible to the University Librarian.

In addition to collection development with special emphasis on selection, the subject librarians are engaged in a combination of some or all of the following activities:

- (a) reference duties;
- (b) compilation of bibliographies;
- (c) organising a S.D.I. service;
- (d) classification and cataloguing.

10.3. EVALUATION

Another activity connected with collection development is evaluation. Here again, the literature provides libraries with guidelines.

Hirsch enumerates four distinct methods that may be employed, whilst Bonn identifies five. (Hirsch, 1959:7-20; Bonn, 1974: 265-304).

These include:

- (a) Comparative techniques, such as checking holdings

- against lists or bibliographies;
- (b) Direct examination of the collection;
- (c) Application of standards;
- (d) Obtaining opinions from regular users;
- (e) Statistical techniques, such as circulation figures; interlibrary loan requests; accession rate, etc.

UNISA intimated in their response to the questionnaire, that they use a combination of methods. They evaluate their study collection by means of a computer-assisted system and their collection in toto by monitoring their interlibrary loan requests. In addition, they check their holdings against bibliographies.

At Pretoria, evaluation is also an on-going activity and the progress made constitutes an integral part of each subject librarian's annual report.

At RAU, lack of time restricts evaluation to donations only.

At the other universities, evaluation is only done on an ad hoc basis, shortage of time and lack of professional personnel being the main factors militating against it being done regularly. The need however for systematic evaluation was generally expressed.

Walker is of the opinion that although comparative techniques are a valid means of evaluation, they should not be done in isolation as the results can be misleading. (Walker, 1978:219-31). The following illustration exemplifies this contention. Using Randall's criteria of supply and demand, he states that a collection may be regarded as adequate if it can supply 95% of the items required by its users. (Randall, 1965:381). In 1978, UCT's circulation statistics stood at 391 323 for long term loans and 207 846 for short term ones. Thus issues totalled 599 169. However, only 6 045 requests were received by the Interlibrary Loans Department, including 939 unsuccessful ones. This then constitutes an adequacy percentage of 99,0%, although it must be borne in mind that no figures were available for unfilled requests at the loan desks. More research however is required in order to establish a realistic adequacy figure, as Miss Hadley reports that about 10% of interloan requests handled by the Provincial Library, which is not a scholarly library, are for books which

are not in any South African library. Of this 10%, nearly one third were for books on applied science. With regard to periodicals, both pure and applied sciences and social science journals were high on the list of materials not available in this country. (Hadley, 1973:29-37). Thus the research might be directed at interlibrary loans where the recorded statistics may not reflect the total need of users for information not contained in the UCT library system. The reasons for failing to use interlibrary loans, could include such factors as anticipation of time delays; cost of loans, particularly if the material has to come from overseas, etc.

Using another evaluation technique, however, also suggested by Randall in a later article, viz., acquisition rate, he urges one of between 6 - 10% of the total holdings for an established collection if the average age of the titles is not to become too obsolescent. (Randall, 1976:8-12).

The need to keep the collection current is stressed by Allen Kent, who proves that the greatest demand for a book occurs in the first two years after publication. (Kent, 1977:1438). Further evidence is supplied by statistics drawn from the NLL, prior to its incorporation into the BLLD, which also indicate the definite bias towards more recent literature in several subject fields.

At UCT however, with a total bookstock, i.e. exclusive of periodicals, government publications, theses, pamphlets, micro-media and audio-visual material, of 403 781 volumes in 1978, and purchases of 8 946 volumes, the acquisition rate for the bookstock was 2,2%. Even if donations are included, the rate only rises to 3,25%. With regard to journals, the acquisition rate in relation to the total periodical stock (exclusive of titles received in microform), was 2,3% and inclusive of donations, 3,57%. Thus two very different pictures emerge which reinforce Walker's stance that a combination of techniques is desirable if a true reflection of the stock is to be obtained.

10.4. JOURNALS

A number of authors, notably Grant (Grant, 1971:64-71);

Trueswell (Trueswell, 1969:458-61); Hodowanec (Hodowanec, 1978: 439-47) and Holland (Holland, 1976:543-47) testify to the fact that a relatively small percentage of stock satisfies the majority of users of university libraries.

The effect of this is of greater significance in the area of journals than in monographs, because:

- (a) Subscriptions tend to become automatically renewed unless specifically cancelled;
- (b) A year's subscription in a particular subject field tends to cost more than an individual book;
- (c) The inflation rate is higher for journals than it is for books.

According to the National Book League (NBL), the average price of books relevant to a university increased by 34,9% between the years 1969/70 to 1974/75, whilst journals increased by 107,9% over the same period. (NBL, 1977:18).

As an example of the amount being spent on journals, inclusive of reference serials, UCT's 1978 commitment was R215 239, made up of R175 997 from the G.P. fund and R39 242 from departmental allocations. This figure represented 57,1% of the library materials budget. The University of Stellenbosch spent 64,78% on journals, whilst UNISA's was the lowest amongst the South African universities at 20%. However, with a very much larger library materials budget, the difference in rands and cents would not have been so great.

The thrust of the questionnaire was directed primarily at the question of allocation of the library materials budget. Thus the focal point of the survey revolved around the variables that might or might not be included in formulae or guidelines, and the role of journals in that context.

In the literature survey devoted to journals however, greater emphasis has been placed on usage patterns and criteria employed in selection and evaluation, as distribution has been covered in the chapter devoted to allocation of funds.

The motive for extending the coverage is to be found in the situation as it exists at UCT, which, after all, is fundamental to this research. There are however several factors that emerge

from the literature which may be of interest not only to UCT, but also to the other universities.

Mention has already been made of the comparatively small number of core journals which satisfy the majority of requests. In the literature, authors highlight other pertinent aspects related to this issue, e.g.:

- (a) The high dependence on current or recent issues as opposed to out-dated volumes. Strain shows that 80% of all requests for scientific and technical journals can be met from the preceding five years. (Strain, 1966:295-304). In the field of social science, 93% of all wanted articles were satisfied by serials published within the preceding eighteen years. (Wood, 1969:108-22). Restricting social sciences to education and psychology, eight years fulfilled 90,6% of the requests. (Perk, 1977:304-8).
- (b) Preference for journals published in the vernacular. English-speaking physicists relied on English language journals for 66,37% of their references. (Hooker, 1935:333-8). 98,4% of all requests for social science journals were for English language ones. (Wood, 1969:108-22).
- (c) Course-related journals circulated far in excess of non-curricular-oriented ones. (Kent, 1977:1438). This tallied with the findings by McGrath and Hodowanec in relation to the bookstock. (McGrath, 1972:212-9; Hodowanec, 1978:439-47).
- (d) Citation analysis may or may not be a predictor of potential use. Opinion here is divided. Perk found that in education and psychology, journals which were indexed tended to circulate more than those which were not. (Perk, 1977:304-8). On the other hand, Strain observed that journals indexed in Physics Abstracts did not coincide with the circulation at the IBM library at which she worked. (Strain, 1966:295-304). Scales came to the same conclusion after reviewing 1 571 serials at the NLL. (Scales, 1976:17-25).
- (e) The relatively greater dependence on journals vs. monographs depending on the discipline was demonstrated by Jones. His analysis indicated a higher reliance on monographs for fine arts, music, history, social science and sociology. Science and chemistry however used journals to a greater extent than books. (Jones, 1972:137-56). Kriz found that postgraduate engineering students were

more dependent on books than serials.
(Kriz, 1978:107).

A fair proportion of the literature deals with means by which unwarranted subscriptions were isolated with a view to cancellation. Although all the South African universities interviewed indicated that cancellation was not undertaken lightly, the method adopted at four of the major American universities is particularly relevant. This is because at these four universities, their general periodicals fund was dissolved and departments were made wholly responsible for all their subscriptions. In this way, departments were required to scrutinise their journals in greater depth knowing that their departmental allocations would have to absorb not only the cost of the subscription but also the effect of escalating costs. (Reid, 1976:266-72).

Seven of the twelve South African campuses have consolidated journal funds which incorporate not only inter-disciplinary and/or expensive indices, bibliographies, abstracts and reference journals, but also departmental subscriptions. Pietermaritzburg and UPE restrict their general periodicals fund to the former category.

10.5. RESOURCE-SHARING

Although the concept of resource-sharing has received intermittent attention since the 1920's in South Africa, comparatively little has been achieved.

Investigations of the bookstock have been made not only by van Rooy and Kennedy in the early 1960's, but more exhaustively and more recently by the NLAC, which is also subsidising some university libraries, thus enabling them to acquire the more esoteric works in predetermined subject areas, as mentioned in the empirical survey.

In the field of bibliographic services, MARC provides the means by which a national co-operative cataloguing network can be established. As an effective bibliographic communication medium, it is also essential for other aspects of resource-

sharing. These include interlibrary lending for which, at the moment, libraries are dependent on UNICAT for monographs and PISAL for periodicals, but being solely South African, their use is limited. MARC would extend the frontiers beyond this country. Another aspect of co-operation which would be facilitated by MARC would be the establishment of a national acquisitions policy.

However, as a number of libraries are currently investigating computerisation of their household activities, the full potential of MARC has not yet been realised, but the development of the NLAC into a national council with executive powers and hopefully an increased budget may be the necessary stimulus that is required for the development of an efficient national library system.

In SASDI, MEDLINE and INIS, scientists, engineers, medical personnel and atomic scientists are provided with computerised current awareness services which enable them to keep au fait with research on an international front. Hitherto no steps have been taken to provide a back-up service of ensuring that journal titles and other research material referred to in the SDI services are available in South Africa.

10.6. ALLOCATION OF FUNDS

Only one university library, viz., UNISA, does not ostensibly allocate the library materials budget to the teaching units, thus following the lines advocated by Bach and Summers. (Bach, 1964:161-5; Summers, 1975:631-42). Although amounts are earmarked for specific purposes for reasons of internal auditing, compilation of library records and statistics, the university librarian is in a position to transfer, withdraw or make additional grants at his discretion.

UNISA's unique position extends beyond the question of non-allocation, and yet these factors which further enhance her unparalleled position, may in fact be contributory factors to her policy of non-allocation:

- (a) UNISA has the highest student enrollment of any South African university, and as the library materials budget is dependent upon student numbers, it has far greater resources than any other university library. Conversely, when resources are limited, the ratio of departmental allocations one to another tends to become an emotive rather than a rational issue;
- (b) By virtue of being a non-residential university, it does not have faculties where the emphasis is on the clinical or practical, e.g. Medicine, Dentistry, Agriculture and Engineering. This means that UNISA is saved from buying heavily in several fields where library materials tend to be expensive.
- (c) Non-residential also means that the library is spared the pressures students and staff at the other universities tend to exert.
- (d) Many UNISA students become subscribers of the residential university libraries in order to supplement UNISA's oppidan collections, particularly outside the P.W.V. area. despite the fact that UNISA is endeavouring to supply an adequate study collection for their undergraduates.

At all the other universities, funds are allocated to the teaching units, who by means of financial statements, are kept informed of the state of their finances. UCT is alone in as much as the funds are allocated to the ten faculties who then inform the library of the distribution among their departments. At the other universities, allocation is made directly to the departments, with the exception of three faculties at the University of the Free State.

SPEC has outlined the foundations upon which the allocation of funds should be made. These include the control of the budget by the library which should be guided in the distribution by the principles of equity, flexibility, objectivity, intelligibility and compatability with collection development statements inclusive of both current and anticipated needs. (A.R.L., 1977:2-8).

The objective and subjective factors warranting incorporation, or at the least consideration, in allocation are itemised. The

latter consist of:

- (a) Mission and goals of the institution;
- (b) Campus politics;
- (c) Historical development of the collection;
- (d) Academic distinction of the departments;
- (e) Extent to which the departments are reliant on library materials.

Mention was already made of collection development policy statements when the principles of allocation were enumerated. These statements should in fact include an analysis of the aims of the university and might well refer to the historical development of the collection in the context of short and long range planning. However, the other factors are not only very difficult to quantify, but any attempt to do so would, by virtue of their very nature, be at variance with the principle of objectivity.

Basically, all the South African universities use a form of formula budgeting in their allocation of funds. The variables considered differ from institution to institution, and these are itemised in the analysis of the questionnaire as well as in Appendix 7. However, even Pietermaritzburg and Free State which employ a fixed formula, allow room for adjustment by annually reviewing the distribution.

Only UCT does not have this flexibility. Thus a more apt description of the allocation system employed by the university libraries in the survey might be described as 'guide-line budgeting'. The variables incorporated in this system are for the most part objectively ascertainable.

Subjective assessments to which Kohut and Walker, McGrath, Gold and Schad, amongst others, are opposed, do feature in some of the universities' calculations. (Kohut, 1975:403-10; McGrath, 1975:356-69; Gold, 1975:397-402; Schad, 1970:155-9).

At the University of the Witwatersrand and at RAU where motivations are required from the departments annually and quinquennially respectively, their validity has to be assessed. Subjectivity is also a factor at Pietermaritzburg and Rhodes

where intuition and experience may influence the final allocations. At UCT, assessment of reader needs was subjectively evaluated by a Sub-Committee of the Library Committee. With the sole exception of UCT, the university librarians of South African universities retain control over an annually revised sum of money which permits a degree of flexibility over and above the annual revision of the allocations to the departments, which also incorporates an element of flexibility.

McGrath initially advocated the use of two empirically determinable variables in his formula. These were title range and average cost, per subject field. (McGrath, 1967: 269-72).

78? The effect of the adoption of this formula can be seen in the table that follows. The figures used have been taken from the Average price of British academic books, 1978. (Cooper, 1977:5-6). Although it can be argued that all South African universities purchase books from countries other than the United Kingdom, it was ascertained, during a pilot study connected with the possible application of MARC, that from the acquisitions of six representative libraries in the Johannesburg/Pretoria area, 37,9% of all purchases were of British origin. American books also totalled 37,9%. In addition, 84,6% of all monographs were in English. (Lodder, 1973:213). Thus the British publication referred to above and used elsewhere in this study, provides an acceptable representational sample. As it is in fact up-dated at six monthly intervals, it is possible to get an average over a couple of years, if required.

The total number of books of academic interest to UCT, published in the United Kingdom during 1978 was 13 729, which represents 42,23% of the British output comprising adult fiction and non-fiction, reference books and children's fiction and non-fiction.¹⁶

¹⁶ The total of 32 511, from which the above percentage was ascertained, was taken from the Library Association Record, v. 81, no.2, 1979, p.57.

Faculty ¹⁷	Books		Price	
	No.	%	Cost	%
Arts	4 881	35,55	£ 7,93	8,07
Commerce	512	3,73	8,58	8,73
Education	453	3,30	7,02	7,14
Engineering	791	5,76	13,62	13,86
Fine Art and Architecture	1 005	7,32	9,60	9,77
Law	494	3,60	10,16	10,34
Medicine	1 546	11,26	14,76	15,02
Music	193	1,41	7,22	7,35
Science	1 955	14,24	14,01	14,25
Social Science	1 899	13,83	5,38	5,47
	<hr/> 13 729	<hr/> 100,00	<hr/> £98,28	<hr/> 100,00

By multiplying title range by the average cost, a percentage of the book budget can be determined from the total cost. (McGrath, 1967:269-72). Using the 1979 allocation of recurrent funds for monographs at UCT as a comparison, the following picture emerges:

Faculty	Total £	% of budget according to McGrath	UCT's 1979 formula %	de Vries' formula %
Arts	38 706,33	28,99	25,6	16,0
Commerce	4 392,96	3,29	8,0	13,13
Education	3 180,06	2,38	1,6	4,04
Engineering	10 773,42	8,07	7,7	10,35
Fine Art & Architecture	9 648,00	7,22	5,7	5,16
Law	5 019,04	3,76	7,6	3,59
Medicine	22 818,96	17,09	19,4	23,0
Music	1 393,46	1,04	1,2	2,38
Science	27 389,55	20,51	17,4	18,13
Social Science	10 216,62	7,65	5,6	4,28
	<hr/> £133 538,40			

¹⁷ Faculty quotas have been ascertained by correlating the Dewey numbers with UCT's faculty structure. The inter-disciplinary units at UCT have been disregarded in order not to cloud the issue at this point. The problem of dealing with them will be referred to in sub-section 11.6.

An analogous calculation may be worked out for journals by using either New Serial Titles or the academic journal subscription survey as conducted by the Library Journal each July. Using the 1978 figures as published in the Library Journal, the following numbers of periodical titles are given together with the average price:

Faculty	Number	%	Price	%
Arts	608	24,84	\$14,63	5,23
Commerce (including Economics)	239	9,76	21,09	7,53
Education	173	7,07	19,49	6,96
Engineering	230	9,39	39,77	14,21
Fine Art & Architecture (including Music)	138	5,64	14,82	5,29
Law	230	9,39	18,74	6,69
Medicine	172	7,03	57,06	20,38
Science	414	16,91	66,48	23,74
Social Science (including Anthropology)	244	9,97	27,90	9,97
	<hr/> 2 448	<hr/> 100,00	<hr/> \$279,98	<hr/> 100,00

Once again, the percentage of the journal budget to which each faculty is entitled can be ascertained. It should be noted that the subject categories used by the Library Journal are not as compatible with UCT's faculties as the classified divisions of Average price of British academic books, but the principle remains the same.

It is also possible with the statistics available at UCT to demonstrate in part the effect of McGrath's third formula. (McGrath, 1975:356-69). This is due to the fact that UCT has a manual circulation system at present, which makes it impossible to get accurate figures on a departmental or even faculty basis. However, some indication of the implications can be gleaned from using branch statistics, with the balance being attributed to the faculties served by Jagger Library.

As was mentioned in the literature survey, the only variables required are circulation statistics and the average price of books

in each subject category. The figures used have been taken from the 1978 statistical report, but exclude periodical and government publication loans, as the formula was designed primarily for the recurrent book budget.

Faculty/ Branch	Circulation	Average ¹⁸ cost	Cost Use R	% Cost use	Allocation
Architecture	11 326	R13,34	151 089	1,82	R 2 344
Education	23 428	12,78	299 410	3,60	4 636
Hiddingh Hall (Fine Art and Speech & Drama)	15 381	19,16	294 700	3,54	4 558
Law	36 790	18,49	680 247	8,17	10 521
Medical and I.C.H.	62 952	26,86	1 690 891	20,31	26 153
Music	25 214	13,14	331 312	3,98	5 125
Menzies ¹⁹ (Science and Engineering)	33 176	25,15	834 376	10,02	12 903
Jagger (Arts, ²⁰ Commerce and Social Science)	304 097	13,29	4 041 449	48,56	62 531
			<hr/> R8 323 474	<hr/> 100,00	<hr/> R128 771 ²¹

The comparison between allocation based on circulation, which represents demand or use, and the average price of books, as per McGrath's formula, and the allocation made to the faculties at UCT is of interest.

¹⁸ Average cost has been taken from Average price of British academic books, 1978 and converted at the then current rate of exchange, viz. R1,82 to £1 sterling.

¹⁹ The price shown against Menzies is derived from the average price of general science and engineering books.

²⁰ The Jagger price reflects the average price for books in Arts (£7,93); Commerce (£8,58) and Social Science (£5,38).

²¹ Allocation figure excludes bequests and donations as well as allocation to the inter-faculty units.

Faculty	Old formula		New formula		McGrath's formula
	R		R		R
Arts	41 966)		32 965)		
Commerce	8 718)	59 845	10 302)	50 478	62 531
Social Science	9 161)		7 211)		
Engineering	8 144)		9 915)		
Science	23 154)	31 298	22 406)	32 321	12 903
Fine Art and Architecture (including Speech and Drama)	6 130		7 340		6 902
Education	1 755		2 060		4 636
Law	3 759		9 787		10 521
Medicine	23 688		24 982		26 153
Music	2 296		1 545		5 125

Thus based on concrete empirically ascertainable data, viz., actual use made of library materials, excluding periodical and government publications, the faculties affected by distortions in both the old dispensation and the new formula which has been provisionally adopted, are Arts, Commerce and Social Science, Music and Education. On the other hand, Engineering and Science have benefitted.

The same principle can be used with regard to the G.P. budget, operating with the same provisos. The prices quoted for average cost were compiled by the UCT's Periodicals Department, based on actual subscriptions for the period 1978/1979.

Faculty/ Branch	Circula- tion	Average cost	Cost Use R	% Cost use	Alloca- tion
Architecture	2 477	R34,91	86 472	1,68	2 504
Education	993	17,51	17 387	0,34	507
Hiddingh Hall	1 820	34,91	63 536	1,23	1 833
Law	1 256	42,70	53 631	1,04	1 550
Medical	19 072	83,44	1 591 368	30,93	46 093
Music	429	26,57	11 399	0,22	328
Menzies	10 236	125,53	1 284 925	24,98	37 226
Jagger	50 522	40,30	2 036 037	39,58	58 984
			5 144 755	100,00	149 025

A comparison of figures derived from empirical data with those that were in operation till early in 1979 when four additional years of subscriptions were transferred to G.P., is illuminating:

Faculty	Old formula (still in operation)	New formula (if imple- mented on G.P.)	McGrath's formula
Arts	R14 318)	R38 150)	
Commerce	2 874) 23 666	11 922) 58 417	R58 984
Social Science	6 474)	8 345)	
Engineering	11 395)	11 475)	
Science	68 106) 79 501	25 930) 37 405	37 226
Fine Art and Architecture	3 352	8 494	4 337
Education	1 419	2 384	507
Law	4 142	11 326	1 550
Medicine	35 882	28 911	46 093
Music	1 063	1 788	328

It is interesting to note the correlation between the new formula (if in fact it was to be used in allocating the G.P. budget), and the McGrath formula for Arts, Commerce, Social Science, Engineering and Science. The implementation of the new formula would certainly benefit Fine Art, Architecture, Education, Law and Music. However, in the case of Medicine, which had a high circulation figure of 19 072 plus an average journal subscription price of R83,44, the new formula would prove to be totally inadequate.

CHAPTER 11

RECOMMENDATIONS

As a result of the findings of the literature survey and drawing upon the empirical study which included all the South African universities operating under comparable financial constraints, the following modifications to the current modus operandi at UCT are suggested as a means of achieving equity and utilising to the best advantage the library materials budget.

11.1. COLLECTION DEVELOPMENT

If the money allocated to the Library for the purchase of library materials is to be used to its maximum potential in promoting the teaching and research needs of the university, it is imperative that collection development policy statements be formulated for each subject area to be collected.

Although the onus for initiating and finalising the compilation of these statements rests with the Library, the involvement of the teaching staff is vital. Thus as a first step, as a means of framing the parameters for each subject area, each department ²² should be requested to state its requirements, including inter alia:

- (a) long and short term needs;
- (b) number and level of courses which will indicate the scope and depth of the collection;
- (c) ideal ratio of monographs to journals;
- (d) projected research programmes;
- (e) postgraduate and staff numbers.

This information will enable the library staff entrusted with the formulation of collection development policy, in regular and continuing consultation with the departments, to compile the statements.

²² The principle of departmental allocation is discussed under the sub-section 11.6.(e).

11.2. SELECTION OF LIBRARY MATERIALS

The value of library participation in selection is testified to in the literature. To name but a few, Danton, Schad, and Bach spring to mind. (Danton, 1963:69-70; Schad, 1969:437-42; Bach, 1957:446-7). Among the South African universities, the employment of subject librarians at UNISA, Pretoria, RAU, Free State and Pietermaritzburg has been welcomed. However, the principle of employing subject librarians has not yet been considered at UCT, despite the weight of evidence in the literature supporting their role, and the experience of other institutions, both local and overseas.

By using branch and 'link' librarians as a stepping stone, which will enable them to gain experience in an extended field, and provided they can, by their expertise prove their ability and professionalism, the concept of academic and librarian inter-dependence in selection can be established.

Thus it is suggested that:

- (a) Branch and 'link' librarians, whose current responsibilities include reference work and a degree of subject specialisation, should be members of their respective departmental selection committees.

Their contribution will be enhanced by the fact that they work in close proximity with both staff and students of the departments they serve, and so are uniquely positioned to have their fingers on the pulse of the users.

- (b) Publishers' blurbs received by the Acquisitions Department should be sent to branch and 'link' librarians instead of to the departments, which is the current practice.

This will enable them to obtain, where applicable, impartial reviews. These blurbs and catalogues could also be checked against the catalogue, thus restricting discussion and selection to material not already in stock. This information will enable the librarian to make a valuable contribution to the selection

committee, and in so doing, become in addition a much-needed liaison officer between the library and the departments.

- (c) Departments served by branches or 'links' already tend to route their orders via the branch or 'link'. This method should be practised throughout the university.

Thus departments served by Jagger, should send their recommendations via the librarian in charge of the reading room. This will have the advantage of not only eliminating unwarranted duplication, but it will also enable the librarians to acquaint themselves with what is being recommended for purchase over and above the decisions reached at the departmental selection committees. It will also ensure that all requests are in conformity with the collection development policy statement relevant to that department.

- (d) During this phase of initiation of subject librarians, each branch and 'link' librarian be allocated a sum of money, depending on the number of departments served by the branch or 'link', from which he or she can augment the selection done by the teaching staff.

This allocation may or may not be used depending on the activity and vitality of the departmental selection committees. It does however enable stock to be acquired which might otherwise be out of print. It will also enable material to be ordered to balance the collections as academics are not, as a matter of course, adequately au fait with the available range of materials. It is hoped that the confidence of the teaching staff in the librarian's ability to make a meaningful contribution will be gained, and the teaching staff will authorise purchases from their departmental allocations and the need for supplemental funds will lapse.

11.3. EVALUATION

The cost of keeping on open access, i.e. the mere physical aspect, was put at 13½c. per volume per annum in the United States

in 1973. (Williams, 1973:15). Other authors, notably Trueswell and Hodowanec testify to only a fraction of the collection fulfilling the majority of user needs. (Trueswell, 1969:458-61; Hodowanec, 1978:439-47). At UCT, during 1978, the Short Loan Collection, i.e. undergraduate reserve book collection, was responsible for 75,06% of all counted use made of books and theses in the UCT library system.

- (a) It would appear economic therefore if current holdings were to be evaluated in the light of the collection development policy statements, and user surveys.

Should material not conform to the profiles of the statements, and should date sheets indicate that certain volumes have not circulated within a given time period, such material should be transferred to storage. This will not only reduce shelving costs, but make the remaining material more accessible. It should also promote browsing because of the resulting relevance of the open access volumes.

11.4. JOURNALS

Once again, studies have intimated that a limited number of core journals meet the majority of requests. (Holland, 1976: 543-7; Perk, 1977:304-8). There is also evidence to show that foreign language journals receive the minimum of use. (Wood, 1969:108-22). Again, there is a tendency for current periodicals to be used far more heavily than retrospective ones. (Perk, 1977:304-8; Strain, 1966:295-304). With these statistics in mind:

- (a) It is recommended that evaluation should include not only the bookstock, but also periodicals currently received.

Perhaps an exercise such as that conducted at the University of Newcastle-upon-Tyne (Carrein, 1977:96-102); at Reading University (Thompson, 1977:7-23); and at four major American universities (Reid, 1976:266-72) might be adapted for use at UCT. (Further reference is made to journal subscriptions in sub-section 11.6.(i)).

This could have three major benefits:

- (i) It could demonstrate the strengths and weaknesses in the holdings;
- (ii) It could identify the little or non-used journals, both in terms of currently received titles and back issues;
- (iii) Money saved from the cancellation of such current subscriptions could either be used for new titles or to purchase alternative library materials.

One other point relating to journals needs to be stated.

This refers to the request for the purchase of back runs, usually from ad hoc money or bequests that are made available.

- (b) In view of the findings by Strain, Burton and Wood, such requests should be viewed more critically. (Strain, 1966:295-304; Burton, 1960:18-22; Wood, 1969:108-22).

An assessment should be made of the likely use of such retrospective material and whether the procuring of the issues or articles via interlibrary loans is not a viable proposition.

11.5. RESOURCE-SHARING

Resource-sharing obviously requires the involvement of at least one other library, and at its extreme, all comparable libraries on a national basis. It is therefore not politic for an outsider, in isolation and without consultation, to make concrete recommendations which would affect another institution. All that can be suggested is that UCT contribute as far as it can to the establishment of a national network system under the auspices of the NLAC's Computerised Cataloguing Network Committee and Committee on the National Bookstock.

In the interim, UCT could, particularly in conjunction with the other libraries in the peninsula, explore ways and means of co-operation. The 'Newcastle experience' provides an example of modular co-operation which might well be suited to the situation in the western Cape. (Harris, 1973:147-9). Any progress made along these lines would not militate against the development of a national network but would in fact enhance it. To

re-iterate a statement made by Kennedy is opportune. "It is therefore recommended that the librarian of the principal library in each major district, should take the initiative in setting up machinery for closer co-operation between libraries in the district." (Kennedy, 1961:85).

11.6. ALLOCATION OF FUNDS

The formulation of guidelines relating to allocation tend to have three fundamental motives. Firstly, the allocation must contribute in the most efficient way possible to the attainment of the goals of the institution. In this case, it is primarily to anticipate and supply the study needs and research materials required by students and staff at UCT. Secondly, the distribution should be equitable. Thirdly, provision should be made for flexibility, so advantage can be taken of, for example, pre-publication offers on expensive items, or ad hoc help to departments whose needs, over and above the allocation, are justifiable. These factors are heightened during a period of financial cut-backs and therefore allocation methods become more critical and open to closer scrutiny. Preferably, policies should be determined under conditions of normal provision.

Suggested guidelines, inclusive of these requirements, follow:

- (a) The percentage given by the State to the university for the acquisition of library materials should be passed on to the library in toto.

As has been pointed out on page 112, UCT libraries should have received 6,52% of the nett university budget for all its expenditure (exclusive of items catered for under Part F, viz. General Operating Expenses, which are itemised on page 110). This percentage is based on weighted student numbers in the joint fields of humanities, natural and medical sciences. However, only 5,24% was received and the 1,28% difference represents an amount of R248 034, or 68,7% of the library materials budget actually received, viz. R361 082.

- (b) That any distribution technique adopted should be reviewed annually in the light of changing circumstances.

These changes could be the introduction of new courses; a department's expressed long- or short-term needs, and evaluation might well reveal weak collections which may require additional funding.

- (c) The effectiveness of the technique employed should be monitored to ensure that the allocation is serving the needs of the library's users.

With the introduction of a computerised issue system in the near future, circulation statistics, broken down by classification numbers, will be a practical possibility and could be a useful monitoring device.

- (d) In order to achieve flexibility, a percentage of up to 15 - 20%, and not less than 12½%, should remain unallocated, and its use left to the discretion of the UCT University Librarian.

As has been noted, Princeton University retains 25% of its library materials budget, and with a budget of \$1 978 637 in 1977/78, this amounts to \$494 659. (A.R.L., 1977: [92-96]). A Librarian's Reserve Fund is also an integral feature of allocation at UCLA. (A.R.L., 1977: [73-77]), and all South African university libraries with the exception of UCT retain a percentage or an amount for just such a purpose.

In addition to providing the necessary means of flexibility, this fund is required for the purchase of multi-disciplinary material, thus obviating the current practice of sub-dividing the purchase price amongst interested departments, which is an unnecessary complication in the book-keeping process. The money is also required for the purchase of duplicate copies, replacements, reference works, general literature, exchanges, non-book materials and staff professional works, funds over which the University Librarian retains control at the moment. These

constituted 5,04% of the 1978 library materials budget, and being so tightly circumscribed, provided no lee way.

- (e) Allocation should be made direct to the departments and not via the faculties.

This is due to the differential rates of inflation and variations in average price, not only between books and journals of one faculty and another, but between books and journals of one department and another in the same faculty. To cite one example, the average price of geography books in 1978 was £8,75, whereas that of chemistry was £20,68. (Cooper, 1978: 5-6). Thus, if one accepts that one of the fundamental principles underlying allocation is equity, funds should be determined on a departmental basis.

- (f) Consideration should be given to the departmental allocation being sub-divided, for purposes of calculation, into a 'basic allocation' and an 'augmentation'. Both should be calculated by using objectively ascertainable variables.

In the case of the 'basic allocation', designed primarily to serve the needs of the undergraduates, title range and average price (with a guaranteed minimum) might be sufficient. Undergraduate student enrollment is not a valid variable as the numbers only influence the amount of duplication necessary, and provision has already been made from the Librarian's Fund for multiple copies. To support the exclusion of student numbers, reference is made to Randall, Reichard, Massman and Voigt, who all considered undergraduate enrollment to be negatively related to acquisition rate and therefore to allocation. (Randall, 1931: 421-35; Reichard, 1966:478-87; Massman, 1970:83-88; Voigt, 1975:263-71).

To exemplify the allocation, a random selection of departments has been chosen, which has enabled concrete data relating to monographs and journals to be used in the examples.

It is suggested that 2/3rds of the amount available for allocation might constitute the 'basic allocation'. For purposes of illustration, 2/3rds of the 1978 budget, viz. R132 788 has been used.

Basic allocation:

R88 525

Sample allocation

Department	Title ²³ range	Average ²⁴ price	Total	%
Education	453	£ 7,02	£3 180	3,6
History	1 275	7,68	9 792	11,1
Law	494	10,16	5 019	5,7
Librarianship	114	5,82	663	0,7
Political Science	439	7,48	3 284	3,7
Psychology	289	9,02	2 607	2,9
Zoology	276	16,01	4 419	5,0

With regard to the 'augmentation', aimed at the acquisition of research material, the suggested variables include the number of postgraduate students and staff in addition to average price. In this instance, enrollment is justified on the basis of individual research undertaken, and thus weighting of postgraduates, differentiating between honours, masters and doctoral students, as well as between staff below senior lecturership level who are not usually involved in supervisory work, and thus might be equated with doctoral students, and above, might be considered.

The rationale behind this method of allocation lies in McGrath's emphasis on a pragmatic quantitative procedure as opposed to the implementation of a critical philosophy based on subjective premises. (McGrath, 1975:356-69). In addition, the benefits deriving from easily retrievable statistics not only facilitates the allocation process, but makes it intelligible, another principle recommended by SPEC. (A.R.L., 1977: 2-8).

Thus the 'augmentation' would represent 1/3rd of the money available for allocation to departments, and using the 1978 budget figures again, this 1/3rd constitutes R44 263.

²³ Cooper, 1978:5-6.

²⁴ Cooper, 1978:5-6.

Sample allocation

Department	Hons	Mas- ters	PhD's & Lecturers	Senior Lecturer	Pro- fessors	Weighted numbers
	1	2	3	4	5	
Education	20	4 8	9 27	6 24	3 15	94
History	7	8 16	9 27	1 4	3 15	69
Law	-	11 22	14 42	8 32	6 30	126
Librarian- ship	-	17 34	3 9	-	1 5	48
Political Science	6	2 4	5 15	1 4	1 5	34
Psychology	17	20 40	17 51	4 16	2 10	134
Zoology	7	20 40	31 93	2 8	4 20	168

Department	Weighted numbers	Average price	Total	%
Education	94	£ 7,02	£ 660	1,5
History	69	7,68	530	1,2
Law	126	10,16	1 280	2,9
Librarianship	48	5,82	279	0,6
Political Science	34	7,48	254	0,6
Psychology	134	9,02	1 209	2,7
Zoology	168	16,01	2 690	6,1

- (g) That, as mentioned in the sub-section dealing with collection development, provision be made for allocations to be made to branch and 'link' librarians, depending on the number of departments they serve.

Whilst realising that the needs of all departments are not comparable, a set figure for each could be used, and the branch or 'link' librarian retain the latitude to supplement the re-

quirements of the larger departments from those of the smaller.

- (h) That in the event of departments not utilising their grants, and not entrusting their branch or 'link' subject librarian to order against them, a percentage of the credit balance be forfeited at the end of each financial year.

This surplus could be transferred to the branch or 'link' librarian's allocation so as to ensure that the necessary material is acquired prior to it going out of print.

- (i) That, apart from general, basic and reference journals, such as citation indices, bibliographies, abstracts, etc., the G.P. fund be reviewed in the light of the holdings of other South African libraries as reflected in PISAL and of one department's share against another.

A list of periodicals currently received could be distributed to all departments, with a request that each department, in the light of usage patterns and possible duplicate subscriptions at nearby libraries, indicate those subscriptions it wishes to retain. This in fact could constitute part of the evaluation of the periodicals collection. Unclaimed journals might then be re-circulated to ascertain yet again that they are not required, and then cancelled, when the survey has been concluded.

The department's proportion of G.P. should also be determined so that no one department gains at the expense of another, whilst accommodating the greater dependence on journals as opposed to monographs, together with the higher cost of such subscriptions, of the sciences and medicine. The inclusion once again of title range and average price would indicate this variable dependence.

Having established the ratios, any subscription over and above those that can be accommodated within the percentages, should be debited to the departmental allocation, with a proviso however that the excess of the journal component should be restricted to a limit, say of 10%, so as to ensure a balanced development of the collection across the board.

Any surplus that might remain in the present G.P. fund, as a result of cancellations or transferral to departmental accounts, could be allocated to the departments along the guidelines suggested.

Using the 1978 G.P. figure of R175 997 to exemplify this distribution, the calculations would be:

Sample allocation

Department	Title ²⁵ range	Average ²⁶ price	Total	%
Education	173	\$19,49	\$3 372	1,92
History	141	13,71	1 933	1,1
Law	230	18,74	4 310	2,45
Librarianship	94	19,34	1 818	1,03
Political Science	124	15,62	1 937	1,1
Psychology	115	34,21	3 934	2,24
Zoology	83	37,05	3 075	1,75

- (j) That as a general principle, bequests or donations not be included in the library materials budget available for allocation.

However, in view of the position at UCT, where one faculty, which also comprises a department has access to an exceedingly generous bequest, it is recommended that a ceiling of a substantial amount be placed on such bequests, say of R1 000 in 1978/1979, which can be adjusted in accordance with inflation rates, above which such monies be taken into account, unless the bequests are for the acquisition of very specialised material, such as antiquarian publications.

- (k) That the amount made available on appointment or promotion to grades of senior lecturership and above, be increased from the current R200, R250 and R300 to say, R400, R500, and R600.

Here again, the amount received as a launching grant should be linked to the inflation index and reviewed periodically, if not annually.

²⁵ Brown, 1978:1359-1360

²⁶ Brown, 1978:1359-1360

(1) Adjustments to calculations would have to be made. These would include, inter alia:

- (i) The deductions of bequests exceeding the ceiling from the recipient department's allocation;
- (ii) That money released from the possible cancellation of subscriptions currently paid for out of G.P., be re-allocated;
- (iii) Additional provision for:
 - (A) Music, as their books represent only 4,68% of their stock, the balance being predominantly sheet music and records and these two classes of material are obviously not reflected in the title range;
 - (B) Education, as the title range covers only the 370's, and does not include the method and teaching of all secondary school subjects which are classified with the subject;
 - (C) Inter-disciplinary units, which as the name suggests, cannot be identified with a specific group of classification numbers.

These guidelines incorporate the principles laid down by SPEC. (A.R.L., 1977:2-8). To summarise them again, SPEC advocates that distribution which should be controlled by the library, should also be equitable, flexible, intelligible, and objective. In addition, it should implement the collection development policy statements and provide for both current and anticipated needs.

SECTION 5

ANNEXURES

APPENDICES AND BIBLIOGRAPHY

DIFFERENCE BETWEEN STATE SUBSIDY AND ACTUAL ALLOCATION EXCLUDING SUBVENTIONS - 1978

F A C U L T Y	WEIGHTED STUDENT NUMBERS AS PER SUBSIDY	SUBSIDY FACTOR PER UNIT	TOTAL AMOUNT	% OF LIBRARY MATERIALS BUDGET	CONVERTED INTO RANDS	ACTUAL FACULTY VOTE	SHARE OF G.P.	T O T A L	DIFFERENCE BETWEEN COLUMNS 6 and 9		% DEVIATION
									R	R	
ARTS	2 086	53	110 558	16,0	44 351	41 966	14 318	56 284	+ 11 933	+ 4.3	
COMMERCE	1 716	53	90 948	13,13	36 396	8 718	2 874	11 592	- 24 804	- 8,95	
EDUCATION	528	53	27 984	4,04	11 199	1 155	1 419	2 574	- 8 625	- 3,11	
ENGINEERING	956	75	71 700	10,35	28 690	8 144	11 395	19 539	- 9 151	- 3,3	
FINE ART AND ARCHITECTURE	674	53	35 722	5,16	14 303	6 130	3 352	9 482	- 4 821	- 1,74	
LAW	469	53	24 857	3,59	9 951	3 759	4 142	7 901	- 2 050	- 0,74	
MEDICINE	1 789	89	159 221	23,0	63 755	23 688	35 882	59 570	- 4 185	- 1,51	
MUSIC	311	53	16 483	2,38	6 597	2 296	1 063	3 359	- 3 238	- 1,67	
SCIENCE	1 674	75	125 550	18,13	50 256	23 154	68 106	91 260	+ 41 004	+ 14,79	
SOCIAL SCIENCE	559	53	29 627	4,28	11 864	9 161	6 474	15 635	+ 3 771	+ 1,36	
T O T A L	10 762		692 650	100,06	277 362	128 171	149 025	277 196			

1978 ALLOCATION OF FUNDS TO TEACHING UNITS EXCLUDING GENERAL PERIODICALS FUND

TEACHING UNITS	ANNUAL RECURRENT	AD HOC	DONATIONS & REQUESTS	T O T A L	% OF FUNDS
ARTS	R 23 981	R 17 985	R 509	R 42 475	29,71%
COMMERCE	4 982	3 736	-	8 718	6,10%
EDUCATION	660	1 095	1 290	3 045	2,13%
ENGINEERING	4 654	3 490	100	8 244	5,77%
FINE ART AND ARCHITECTURE	3 503	2 627	375	6 505	4,55%
LAW	2 148	1 611	6 072	9 831	6,88%
MEDICINE	13 536	10 152	1 400	25 088	17,55%
MUSIC	1 312	984	-	2 296	1,61%
SCIENCE	13 231	9 923	412	23 566	16,49%
SOCIAL SCIENCE	5 235	3 926	-	9 161	6,41%
INTER-FACULTY UNITS	2 010	2 007	-	4 017	2,80%
T O T A L	R 75 252	R 57 536	R 10 158	R 142 946	100,00%

LIBRARY MATERIALS BUDGET FORMULA CURRENTLY IN OPERATION

RELEVANT DATA	1976 FIRST YEARS x 1	1977 FIRST YEARS x 1	1978 FIRST YEARS x 1	1976 UNDER-GRADS x 3	1977 UNDER-GRADS x 3	1978 UNDER-GRADS x 3	1976 HONS x 6	1977 HONS x 6	1978 HONS x 6	1976 M's & Ph D's x 10	1977 M's & Ph D's x 10	1978 M's & Ph D's x 10	TO- TAL
	1976 FIRST YEARS x 1	1977 FIRST YEARS x 1	1978 FIRST YEARS x 1	1976 UNDER-GRADS x 3	1977 UNDER-GRADS x 3	1978 UNDER-GRADS x 3	1976 HONS x 6	1977 HONS x 6	1978 HONS x 6	1976 M's & Ph D's x 10	1977 M's & Ph D's x 10	1978 M's & Ph D's x 10	
FACULTIES													
ARTS + 1/3 LAW	(530+23) 553	(480+12) 492	(558+6) 564	988 2 964	1 017 3 051	1 047 3 141	61 366	76 456	70 420	78 780	51 510	88 880	14177 4726
COMMERCE	258	311	449	724 2 172	756 2 268	829 2 487	17 102	61 366	104 624	68 680	80 800	72 720	11237 3746
EDUCATION	51	70	73	318 954	305 915	403 1 209	21 126	19 114	20 120	2 20	1 10	4 40	3702 1234
ENGINEERING	(299) 0	(247) 0	(187) 0	650 1 950	729 2 187	722 2 166	- -	- -	- -	103 1030	85 850	92 920	9103 3034
FINE ART AND ARCHITECTURE	153	132	101	496 1 488	491 1 473	465 1 395	- -	- -	- -	29 290	27 270	36 360	5662 1887
LAW	(69) 46	(38) 26	(19) 13	489 1 467	506 1 518	479 1 437	- -	- -	- -	8 80	9 90	10 100	4777 1592
MEDICINE	(244) 169	(205) 213	(138) 231	961 2 883	1 053 3 159	1 069 3 207	1 6	1 6	21 126	178 1780	149 1490	183 1830	15100 5033
MUSIC	81	84	85	167 501	176 528	202 606	- -	- -	- -	19 190	13 130	8 80	2285 762
SCIENCE + ENGINEERING & MEDICINE	(258+299 + 244) 801	(283+247 + 205) 735	(383+187 + 138) 708	543 1 629	549 1 647	590 1 770	68 408	69 414	53 318	140 1400	95 950	91 910	11690 3897
SOCIAL SCIENCE	179	142	146	222 666	290 870	268 804	14 84	28 168	31 186	32 320	32 320	27 270	4155 1385
T O T A L	2 291	2 205	2 370	5558 16 674	5872 17 616	6074 18 222	182 1092	254 1524	299 1794	657 6570	542 5420	611 6110	81888 27296

FACULTIES	RELEVANT DATA	AVERAGE WEIGHTED STUDENT NUMBERS 1976-1978	ESTIMATED READING NEED INCLUSIVE OF TITLE RANGE	AVERAGE BOOK AND JOURNAL PRICES	COLUMNS 1 x 2 x 3 ÷ 1000	FINAL FACTOR %	1978 BOOK BUDGET %	% CHANGE FOR 1979
ARTS		4 726	10,0	12,2	576	25,6	31,6	- 6,0
COMMERCE		3 746	3,0	16,2	182	8,0	6,57	+ 1,43
EDUCATION		1 234	3,8	7,8	37	1,6	1,32	+ 0,6
ENGINEERING		3 034	2,5	23,0	174	7,7	6,13	+ 1,57
FINE ART AND ARCHITECTURE		1 887	4,5	15,2	129	5,7	4,62	+ 1,08
LAW		1 592	4,0	26,8	171	7,6	2,83	+ 4,77
MEDICINE		5 033	2,8	31,0	437	19,4	17,84	+ 1,56
MUSIC		762	3,5	9,6	26	1,2	1,73	- 0,53
SCIENCE		3 897	3,5	28,8	393	17,4	17,44	- 0,04
SOCIAL SCIENCE		1 385	6,5	14,0	126	5,6	6,90	- 1,30
TOTAL		27 296			2 251			

FORMULA AS APPLIED TO LIBRARY MATERIALS BUDGET (EXCLUDING INTER-FACULTY UNITS) USING 1978 FIGURES

FACULTIES	MONEY MADE AVAILABLE TO FACULTIES			SUB- TOTAL	PORTION of G.P.	TOTAL ALLO- CATION	% OF TOTAL ALLO- CATION	% AS REC- OMMENDED BY SUB- COMMITTEE	CONVERTED INTO RANDS	DIFFERENCE BETWEEN ALLOCATION & FORMULA
	ANNUAL RECURRENT	AD HOC	SUB- VENTIONS							
ARTS	23 981	17 985	509	42 475	14 318	56 793	19,72	25,6	73 716	- 16 923
COMMERCE	4 982	3 736		8 718	2 874	11 592	4,03	8,0	23 036	- 11 444
EDUCATION	660	600) 495)	1 290	3 045	1 419	4 464	1,55	1,6	4 607	- 143
ENGINEERING	4 654	3 490	100	8 244	11 395	19 639	6,82	7,7	22 172	- 2 533
FINE ART AND ARCHITECTURE	3 503	2 627	375	6 505	3 352	9 857	3,42	5,7	16 413	- 6 556
LAW	2 148	1 611	6 072	9 831	4 142	13 973	4,85	7,6	21 885	- 7 912
MEDICINE	13 536	10 152	1 400	25 088	35 882	60 970	21,17	19,4	55 863	+ 5 107
MUSIC	1 312	984		2 296	1 063	3 359	1,17	1,2	3 455	- 96
SCIENCE	13 231	9 923	412	23 566	68 106	91 672	31,84	17,4	50 104	+ 41 568
SOCIAL SCIENCE	5 235	3 926		9 161	6 474	15 635	5,43	5,6	16 125	- 490
T O T A L	73 242	55 529	10 158	138 929	149 025	287 954	100,00	99,8	287 376	

DISTRIBUTION OF GENERAL PERIODICALS FUND AS FROM 1979

F A C U L T I E S	G.P. ALLOCATION 1978	%	OF GP ALLOCATION	ADDITIONAL G.P. ALLOCATION 1979	%	OF ADDITIONAL ALLOCATION	TOTAL OF G.P BUDGET	%	OF G.P. BUDGET 1979
	R	%	R	%	R	%	R	%	
ARTS	14 318	9,6	3 598	15,73	17 916	10,42			
COMMERCE	2 874	1,93	1 313	5,74	4 187	2,44			
EDUCATION	1 419	0,95	449	1,96	1 868	1,09			
ENGINEERING	11 395	7,65	3 027	13,23	14 422	8,39			191
FINE ART AND ARCHITECTURE	3 352	2,25	693	3,03	4 045	2,35			
LAW	4 142	2,78	2 195	9,59	6 337	3,69			
MEDICINE	35 882	24,08	4 435	19,39	40 317	23,45			
MUSIC	1 063	0,71	82	0,36	1 145	0,67			
SCIENCE	68 106	45,70	5 940	25,96	74 046	43,07			
SOCIAL SCIENCE	6 474	4,34	1 145	5,01	7 619	4,43			
T O T A L	149 025	99,99	22 877	100,00	171 902	100,00			

Appendix 6

UNIVERSITY OF CAPE TOWN

M.A. (Librarianship)

*"Considerations requiring investigation in
the allocation of funds for library materials
at the University of Cape Town"*

R. A. B. EAVE

*Questionnaire on the acquisition
of library materials*

PLEASE USE A TICK ✓ TO INDICATE
YOUR ANSWER WHERE APPROPRIATE

1. BUDGET APPROPRIATION

- 1.1. Total library budget appropriation
(i.e. inclusive of salaries, wages,
library materials, binding, main-
tenance and overheads):

For 1963

R

1968

R

1973

R

1978

R

- 1.2. Percentage of total university budget:

For 1978

%

- 1.3. Percentage of library budget spent
on salaries and wages:

For 1963

%

1968

%

1973

%

1978

%

- 1.4. Amount spent on acquisition of library
materials (i.e. books, journals and other
serials, microforms and other media, but
excluding binding, maintenance, postage,
stationery and other overheads):

For 1978

R

- 1.5. Amount spent on G.S.T. and surcharge:

For 1978

R

2. POLICIES AND PROCEDURES RELATING TO
SELECTION OF LIBRARY MATERIALS

- 2.1. Outline your selection policy and
procedures:

2.1.1. In general terms:

2.1.2. Relating to material for specific
departments or disciplinary units:

2.1.3. Relating to interdisciplinary materials:

2.1.3.1. General reference books:

2.1.3.2. General reference journals:

2.1.3.3. Newspapers and popular magazines:

2.1.3.4. Microforms:

2.1.3.5. Africana and manuscript collections:

2.1.3.6. Ad hoc purchase of rare and/or
expensive items:

2.1.3.7. Fields/disciplines not represented
by formal teaching/research units:

2.1.3.8. Other (please specify):

2.1.4. Relating to undergraduate materials:

2.1.4.1. Recommended reading lists:

2.1.4.2. Basic texts, i.e. prescribed books

2.1.4.3. Multiple copies:

2.1.5. Relating to research/postgraduate materials:

2.1.5.1. Books:

2.1.5.2. Journals:

2.1.6. What special collections do you have?

2.1.6.1. What subjects do they cover?

2.1.6.2. Would you be prepared to make
them into a primary resource
centre:2.2. Do you endeavour periodically to evaluate
your total holdings or a part of them

YES	NO
-----	----

2.2.1. If yes, please specify:

2.2.2. Any other comments on the regular
need to evaluate the collection:

2.2.3. Do you have a general policy for the regular weeding of your collection?

YES	NO
-----	----

2.2.4. If yes, please specify:

2.2.5. Any other comments re systematic weeding?

2.3. If book selection is done by members of the teaching staff, does the library retain the right not to order particular items which may be regarded as unsuitable?

YES	NO
-----	----

2.3.1. If yes, is the teaching department notified and the reason given?

YES	NO
-----	----

2.4. Are any precautions taken to avoid the perpetuation of glaring deficiencies or imbalances in the collection?

YES	NO
-----	----

2.4.1. If yes, please specify procedures:

2.5. If book selection is done by subject specialists/subject librarians, do they have any other duties?

YES	NO
-----	----

2.5.1. If yes, please specify:

2.5.2. What qualifications in the relevant subject field do you consider desirable for subject librarians to have:

Doctorate

Master's

Honours

Bachelor's

Foreign languages

Other (please specify):

YES	NO
YES	NO
YES	NO
YES	NO
YES	NO

2.5.3. On what basis is the range of fields/disciplines assigned to individual subject librarians demarcated?

2.5.4. By employing subject librarians, are you able to keep within the ratio laid down by the van Wyk de Vries Commission re purchases and staff? (i.e. c.42:58 at present)

YES	NO
-----	----

2.5.5. Additional comments:

2.5.6. To whom are the subject librarians responsible in the library hierarchy?

--

2.5.7. Do your subject librarians accept without question (apart from duplicates) recommendations from the teaching staff?

YES	NO
-----	----

2.5.8. Additional comments (if considered necessary):

2.5.9. What criteria do they employ in selection? (Please outline in general terms):

2.6. Please outline your selection/acquisition policy re preference of microform to:

2.6.1. Original printed matter if latter is rare, expensive, little-used, bulky, etc.

2.6.2. Monographs

2.6.3. Current subscriptions to journals

2.6.4. Back issues of journals

2.6.5. Antiquarian material

2.7. With regard to purchase of library material, are orders sent to:

2.7.1. Agents in countries of origin

YES	NO
YES	NO

2.7.2. South African book trade

2.7.3. Favoured agents irrespective of country of origin

YES	NO
-----	----

2.7.4. Which agents do you use most extensively for monographs and journals published in:

MONOGRAPHS	JOURNALS

2.7.4.1. America

2.7.4.2. Australasia

- 2.7.4.3. Britain
 2.7.4.4. France
 2.7.4.5. Holland
 2.7.4.6. Italy
 2.7.4.7. Scandinavia
 2.7.4.8. South Africa
 2.7.4.9. South America
 2.7.4.10. Switzerland
 2.7.4.11. West Germany
 2.7.4.12. Other countries (please
 specify):

MONOGRAPHS	JOURNALS

- 2.7.5. What percentage of orders are
 routed overseas?

	%
--	---

3. DISTRIBUTION OF LIBRARY MATERIAL FUND AMONG
 DEPARTMENTS, FACULTIES OR OTHER UNITS OF THE
 UNIVERSITY

- 3.1. Do you employ a system of allocating funds
 to specific units, such as teaching depart-
 ments, research units, faculties, etc.?

YES	NO
-----	----

- 3.2. If so, on what principle is the system
 based:

- 3.2.1. A fixed formula
 3.2.2. Annual review of specific
 amounts per unit

YES	NO
-----	----

YES	NO
-----	----

- 3.2.3. Provision in response to recom-
 mendations by units

YES	NO
-----	----

- 3.2.4. By ad hoc arrangements

YES	NO
-----	----

- 3.2.4.1. If yes to 3.2.4.
 please specify:

- 3.2.5. Other (please specify):

3.3. To which unit is the allocation made:

3.3.1. Faculties

YES	NO
-----	----

3.3.2. Individual teaching departments
and research units

YES	NO
-----	----

3.3.3. Groups of related disciplines
(e.g. van Wyk de Vries groupings)

YES	NO
-----	----

3.3.4. Other (please specify):

3.4. Who assumes legal responsibility for the
allocation of funds:

3.4.1. University Librarian

YES	NO
-----	----

3.4.2. Library Committee

YES	NO
-----	----

3.4.3. 3.4.1. and 3.4.2. jointly

YES	NO
-----	----

3.5. If practised according to 3.2.1. and/or
3.2.2., please itemise variables taken
into consideration:

3.5.1. Student enrollment (undifferentiated)

YES	NO
-----	----

3.5.2. Student enrollment (differentiated)

YES	NO
-----	----

3.5.3. If 3.5.2. is applicable, please
specify weighting:

3.5.3.1. First years

3.5.3.2. Second years

3.5.3.3. Balance of undergraduates

3.5.3.4. Honours

3.5.3.5. Master's

3.5.3.6. Doctorates

3.5.4. Strict application of the van Wyk de
Vries Commission scales, i.e. all
undergraduates and non-graduate dip-
loma students as 1 unit each; honours
students as 2 units each for 1 year only;
masters as 3 units each for 1 year only;
doctoral students as 3 units each for 2
years only and extra-mural as 0,75 each

Continued on the next page

over 4 years plus average price
of books and periodicals of (in
1978) R53 for Group 1; R75 for
Group 2 and R89 for Group 3.

(de Vries, 1974:340 & 351)

YES	NO
-----	----

- 3.5.5. Adaptation of the van Wyk de
Vries scales:

YES	NO
-----	----

3.5.5.1. If yes, please specify:

- 3.5.6. Staff (undifferentiated)

YES	NO
-----	----

- 3.5.7. Staff (differentiated)

YES	NO
-----	----

- 3.5.8. If 3.5.7. is applicable, please
specify weightings:

3.5.8.1. Research assistants

--

3.5.8.2. Junior lecturers

--

3.5.8.3. Lecturers

--

3.5.8.4. Senior lecturers

--

3.5.8.5. Associate professors
or Readers

--

3.5.8.6. Professors

--

3.5.8.7. Part-time staff

--

3.5.8.8. Other (please specify):

- 3.5.9. Range, scope and level of courses
offered

YES	NO
-----	----

- 3.5.10. Assessment of reader needs

YES	NO
-----	----

3.5.10.1. If yes, please specify
the grounds on which
the assessment is made:

3.5.10.2. Please indicate the
weightings used for the
various faculties/de-
partments:

3.5.11. Average price of books
and other media

YES	NO
-----	----

3.5.12. Average price of current
journal subscriptions

YES	NO
-----	----

3.5.13. Proximity of other libraries

YES	NO
-----	----

3.5.14. Range of monograph titles of
academic interest

YES	NO
-----	----

3.5.15. Range of journal titles of
academic interest

YES	NO
-----	----

3.5.16. Periodical subscriptions which
may be paid for out of a con-
solidated fund

YES	NO
-----	----

3.5.17. Special bequests to units:

3.5.17.1. Recurrent

YES	NO
-----	----

3.5.17.2. Ad hoc

YES	NO
-----	----

3.5.18. Circulation statistics

YES	NO
-----	----

3.5.19. Any other factors (please specify):

3.6. Is a fixed percentage of the money available
for library materials retained by the Univer-
sity Librarian for use at her/his discretion,
other than for duplication of titles already
held?

YES	NO
-----	----

3.6.1. If yes, what percentage;

%	
---	--

3.6.2. For what purposes is this money used:

3.6.2.1. Multidisciplinary

YES	NO
-----	----

3.6.2.2. Extradisciplinary

YES	NO
-----	----

3.6.2.3. Expensive items

YES	NO
-----	----

3.6.2.4. To assist units in tem-
porary financial straits

YES	NO
-----	----

3.6.2.5. Other (please specify):

3.6.3. If no, is provision made in the
library materials budget for items
listed in 3.7?

YES	NO
-----	----

3.7. What percentage of the library materials budget in 1978 was reserved for:

3.7.1. Duplication

3.7.2. Replacements

3.7.3. Reference works

3.7.4. Other (please specify)

	%
	%
	%

	%
	%
	%
	%
	%

3.8. Do you think it is feasible to devise a formula:

3.8.1. To provide a fixed basis for the equitable distribution of funds for the purchase of library materials?

YES	NO
-----	----

3.8.1.1. If yes, please elaborate briefly:

3.8.1.2. If no, please state the main reason for your opinion:

3.8.2. To establish realistic guidelines on which to base a sound distribution policy?

YES	NO
-----	----

3.8.2.1. If yes, please elaborate briefly:

- 3.8.2.2. If no, please specify the main obstacles in accomplishing such guidelines:

4. RECURRENT FUNDING OF JOURNAL SUBSCRIPTIONS

- 4.1. Are current journal subscriptions included in the allocation per unit?

YES	NO
-----	----

- 4.1.1. Do you place a ceiling on the percentage that may be used for journal subscriptions per unit?

YES	NO
-----	----

- 4.1.2. If yes, please specify percentage:

--

- 4.2. Do you have a consolidated journal subscription fund?

YES	NO
-----	----

- 4.2.1. If so, what proportion does it constitute of the library materials budget?

--

- 4.3. Are 4.1. and 4.2. combined?

YES	NO
-----	----

- 4.3.1. If yes, what criteria are used to transfer subscriptions from the unit to the consolidated fund?

- 4.4. What amount of the library materials budget was spent on journals in 1978?

R

- 4.5. Who authorises the cancellation of journal subscriptions in cases of:

- 4.5.1. Duplication

- 4.5.2. Lack of use

- 4.5.3. Exorbitant price increase

5. RECURRENT FUNDING

5.1. If money is allocated to units, and a unit fails to use its grant by the end of the financial year, does the money revert to a general fund, or is it credited to the following year's grant?

FORFEITED	CREDITED
-----------	----------

5.2. Are financial statements sent to the units at regular intervals?

YES	NO
-----	----

5.2.1. If yes, how frequently?

5.2.1.1. Weekly

YES	NO
-----	----

5.2.1.2. Monthly

YES	NO
-----	----

5.2.1.3. Quarterly

YES	NO
-----	----

5.2.1.4. Six-monthly

YES	NO
-----	----

5.2.1.5. Annually

YES	NO
-----	----

5.2.2. If yes, what information do they convey?

5.2.2.1. Books on order figure

YES	NO
-----	----

5.2.2.2. Unpaid journal subscriptions

YES	NO
-----	----

5.2.2.3. Balance available

YES	NO
-----	----

5.2.2.4. Other (please specify):

6. AD HOC FUNDING

6.1. Do you have additional funding which is not automatically allocated to the units?

YES	NO
-----	----

6.1.1. If yes, what percentage of the library materials budget does it constitute?

%

6.2. If yes, is this money kept by the University Librarian to be used at her/his discretion?

YES	NO
-----	----

6.3. Is the money made available to the academic units?

YES	NO
-----	----

6.3.1. If yes, how is this allocation made?

6.4. Please indicate nature and/or source of additional funding:

6.4.1. CSIR/HSRC

YES	NO
YES	NO
YES	NO
YES	NO

6.4.2. Provincial administration

6.4.3. Other institutions

6.4.4. Bequests

6.4.5. Subvention by the university council

YES	NO
YES	NO
YES	NO

6.4.6. NLAC subsidy

6.4.7. Professional associations

6.4.8. Other (please specify):

6.5. Is ad hoc money made available to new academic appointees?

YES	NO
-----	----

6.5.1. If yes, does the amount vary according to the position?

YES	NO
-----	----

6.5.2. If yes, what amounts are allocated to:

6.5.2.1. Lecturer

R
R

6.5.2.2. Senior lecturer

6.5.2.3. Associate professor
or Reader

R
R

6.5.2.4. Professor

6.5.2.5. Other (please specify):

6.5.3. Are the same amounts allocated in the case of promotion?

YES	NO
-----	----

6.6. Is ad hoc money made available for the establishment of subject collections in newly created teaching/research units?

YES	NO
-----	----

6.6.1. If yes, on what basis are such funds provided?

7. TAXES, SURCHARGES AND DISCOUNTS

7.1. When ordering library materials, do you record an estimate for:

7.1.1. Each order

7.1.2. Entire order

7.2. Do you make provision for G.S.T.?

7.3. Do you make provision for surcharge?

7.4. Do you make provision for inflation?

7.5. If provision is made for 7.2., 7.3. and/or 7.4. do you add it to:

7.5.1. Each item

7.5.2. Entire order (i.e. collective figure)

7.5.3. Debit them from balance available to units

7.5.4. Have separate account to which they are debited

7.5.5. Other (please specify):

YES	NO
YES	NO
YES	NO
YES	NO
YES	NO

YES	NO
-----	----

YES	NO
-----	----

YES	NO
-----	----

YES	NO
-----	----

7.6. What discounts do you get from local agents for:

7.6.1. British material

7.6.2. Foreign material

7.6.3. Local material

	%
	%
	%

8. ACQUISITIONS FIGURES

8.1. How many monograph volumes (excluding donations and exchanges) were added to your stock in:

1963

1968

1973

1978

8.2. How many microform titles were purchased in:

1963

1968

1973

1978

8.3. How many journal subscriptions (excluding changes of titles, amalgamations, exchanges and donations) were added in:

1963

1968

1973

1978

8.4. How many current subscriptions to periodicals were held in:

1963

1968

1973

1978

8.5. Relating to your interlibrary loans department, how many items were borrowed in:

1963

1968

1973

1978

8.6. How many items were lent by your interlibrary loans department in:

1963

1968

1973

1978

8.7. How many photocopies were obtained by your interlibrary loans department from other institutions in:

1963

1968

1973

1978

- 8.8. How many photocopies were supplied by your interlibrary loans department to other institutions in:

1963

1968

1973

1978

9. ACQUISITIONS PROCEDURES

- 9.1. Does your acquisitions department demand/request full bibliographical details

YES	NO
-----	----

- 9.1.1. If yes, please indicate items required:

9.1.1.1. Author statement

9.1.1.1.1. In full

9.1.1.2. Title statement

9.1.1.2.1. In full

9.1.1.3. Edition statement

9.1.1.4. Series

9.1.1.5. Imprint

9.1.1.5.1. In full

9.1.1.6. ISBN

9.1.1.7. Source of bibliographical information

YES	NO
YES	NO
YES	NO
YES	NO
YES	NO
YES	NO
YES	NO
YES	NO

YES	NO
-----	----

- 9.2. If full bibliographical details are not required, what are the minimum requirements?

- 9.3. Does the Acquisitions department search for missing bibliographical details?

YES	NO
-----	----

- 9.4. Does the library run an appro plan for interested departments?

YES	NO
-----	----

- 9.5. Does the Acquisitions department keep a running balance of each account it administers?

YES	NO
-----	----

9.5.1. If yes, please summarise procedure used:

9.6. Do you have a special fund for multi-disciplinary works other than general reference material?

YES	NO

9.6.1. If yes, who authorises purchases?

9.6.2. If no, do you permit departments to share the cost of expensive items?

YES	NO
-----	----

9.6.2.1. If yes, what is the minimum amount you allow to be subdivided?

R

9.7. Do you plan to computerise your acquisitions department?

YES	NO
-----	----

9.7.1. If yes, please indicate likely method:

9.7.1.1. Total system

9.7.1.2. MARC

9.7.1.3. Package deal

9.7.1.4. Regional networking

9.7.1.5. National networking

9.7.1.6. Additional comments:

YES	NO
YES	NO
YES	NO
YES	NO
YES	NO

10. GENERAL

10.1. Please comment on any matters referred to in Points 1 - 9 for further elucidation if considered necessary:

FACTORS TAKEN INTO CONSIDERATION BY UNIVERSITY LIBRARIES WITH REGARD TO ALLOCATION OF FUNDS FOR LIBRARY MATERIALS															
University Libraries	Student No's		Staff No's		Range, scope level of courses	Reader needs	Average price		Title range	Bequests		Circulation statistics	Consolidated periodical fund	Proximity of other libraries	Other factors
	U	D	U	D			B	J	B	J	Ad hoc				
ISA					+	+	+		+	+	+	+	+	+	
pe Town		+				+	+	+	+						
ee State	+		+		+		+	+				+	+		
tal - urban				+											
etermaritzburg		+	+				+	+	+	+				+	Modified by intuition & experience
rt Elizabeth							+	+							
tchefstroom	+						+	+							
etoria					+	+	+			+			+	+	
nd Afrikaans					+	+	+		+	+		+	+	+	Motivation by departments every 5 - 6 years
odes		+	+		+		+	+							Postgraduate successes & intuition
ellenbosch	+		+		+		+		+	+				+	
twatersrand		+		+	+			+	+	+				+	Motivation by dept annually.Previous spending

APPENDIX 7

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